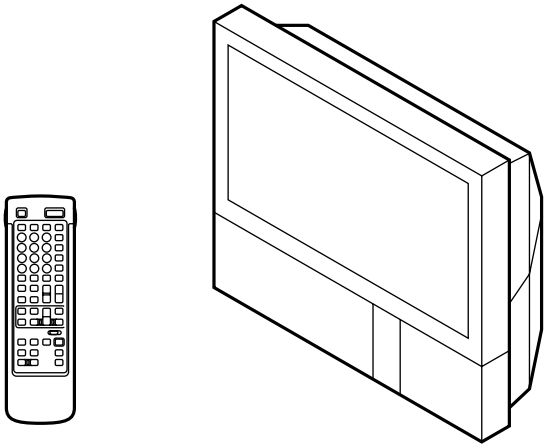
SERVICE MANUAL

LE-1 CHASSIS

MODEL	COMMANDER	DEST.
KL-37W2U	RM-838	UK

MODEL	COMMANDER	DEST.



MICROFILM

* Please file according to model size. ....□

37

TRINITRON® COLOR TV

SONY®

Specifications

This product complies with the EU Directive 89/336/EEC.

Television system	B/G/H, D/K, I, L
Colour system	NTSC 3.58/4.43 (VIDEO IN)
Channel coverage	See “Receivable channels and channel displays” at the bottom.
Projected picture size	37 inches Approx. 94 cm diagonally

Terminals

Rear	1 21-pin Euro connector (CENELEC standard) inputs for audio and video signals - inputs for RGB - outputs of TV video and audio signals 2/ 2 21-pin Euro connector - inputs for audio and video signals - inputs for S video - outputs for audio and video signals (selectable) 4/ 4 21-pin Euro connector - inputs for audio and video signals - inputs for S video - outputs for audio and video signals (monitor out) 2, 4 S video inputs - 4 pin DIN Audio inputs (L, R) - phono jacks S video output 4-pin DIN Audio outputs - phono jacks Audio outputs (variable)-phono jacks
Front	3 video input - phono jack Audio inputs - phono jacks 3 S video input - 4-pin DIN Headphone jack: stereo minijack

Sound output	2 × 5 W (RMS) Centre 1 × 20 W
Power consumption	170W
Dimensions (W × H × D)	Approx. 920 × 825 × 390 mm
Weight	Approx. 29 kg
Supplied accessories	See page 6.
Other features	Digital comb filter (High resolution) PAP (Picture-and-picture) FASTEXT Graphic Equalizer

Design and specifications are subject to change without notice.

Receivable Channels and Channel Displays

	Receivable channels	Indication on the screen
B/G/H	E2..12 21..69	C02 C03 C04..C12 C21..C69
CABLE TV (1)	S1..41	S01 S02..S41
CABLE TV (2)	S01..S05 M1..M10 U1..U10	S42..S46 S01..S10 S11..S20
ITALY	A B C D E F G H H1 H2 21..69	C11..C69
D/K	R01..R12 R21..R69	C02..C12 C21..C69
CABLE TV (1)		S01 S02..S41
CABLE TV (2)		S42 S43..S46
CABLE TV	B..Q, S21..41	S02, S03..S17, S21..S41
L	F2..F10 F21..F69	C01..C12 C21..C69
I	B21..B68	C21..C68

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SAFETY-RELATED COMPONENT WARNING!!
COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

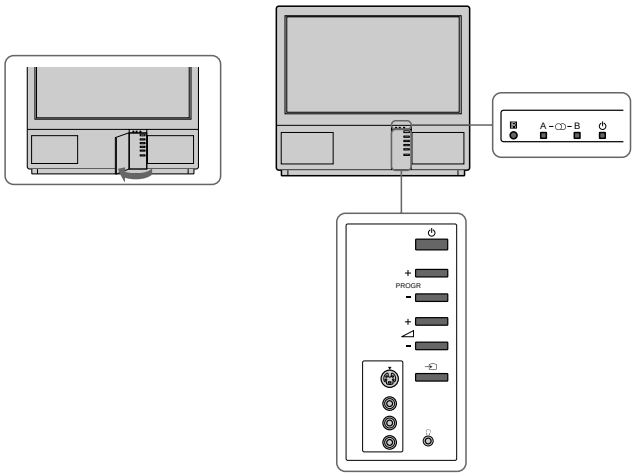
The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remein as in the manual.

SECTION 1
GENERAL

Overview

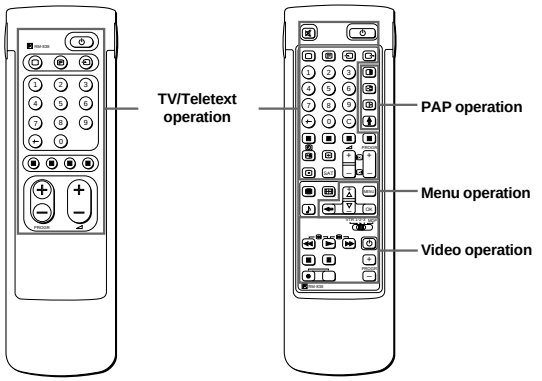
This section briefly describes the buttons and controls on the TV set and on the Remote Commander. For more information, refer to the pages given next to each description.

TV set-front



Symbol	Name	Refer to page
f	Main power switch	14
f	Standby indicator	14
A - m - B	Stereo A/B indicators	16
PROGR+/–	Programme	14
⊿+/–	Volume buttons	14
–⊖	Input select buttons	15
l	Headphones jack	23
–⊖ 3, –⊖ 3, –⊖ 3	Input jacks (S video/video/audio)	24

Remote commander



Simple side

Full-Function side

Note
The SAT button does not operate with this TV.

TV/Teletext operation

Symbol	Name	Refer to page
o	Mute on/off button	15
f	Standby button	14
0	TV power on/TV mode selector button	14
_	Teletext button	15
–⊖	Input mode selector	15
⊖→	Output mode selector	24
1,2,3,4,5,6, 7,8,9 and 0	Number buttons	14
–/--	Double-digit entering button	14
C	Direct channel entering button	10
⊿+/–	Volume control button	14
PROGR +/–	Programme selectors	14
	Teletext page access buttons	20
⏺	Picture adjustment button	16
♪	Sound adjustment button	16
$	On-screen display button	15
[	Teletext hold button	20
#	Time display button	15
L L L L	Fastext buttons	20
⏮	"Freeze" button	15
	Button to change Screen Format	15

PAP (Picture-and-picture) operation

Symbol	Name	Refer to page
◨	PAP on/off button	18
C	PAP source selector	18
⊖	Swap button	18
◳	PAP freeze button	18

Menu operation

Symbol	Name	Refer to page
MENU	Menu on/off button	7
>+/ ?–	Select buttons	7
OK	OK(confirming)button	7
@	Back button	7

Video operation

Symbol	Name	Refer to page
VTR1/2/3, MDP	Video equipment selector	26
;; - :: L J a f PROGR +/–	Video equipment operation buttons	26

Getting Started

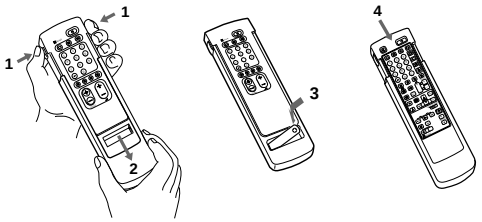
Step 1 Preparation

❶ Check the supplied accessories

When you've taken everything out of the carton, check that you have these items:

- RM-838 Remote Commander
- One IEC designation R6 battery
- Wrench (1)
- Bracket (2)
- Dust Remover (1)

❷ Insert the battery into the Remote Commander



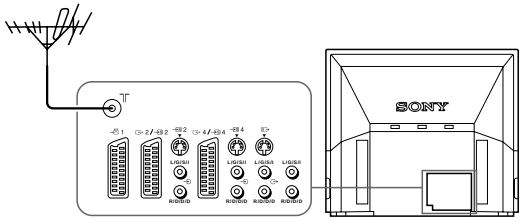
Remove the cover.

Check the correct polarities.

Refit the outside cover making sure that the Full-Function side is visible to use the menu in step 2.

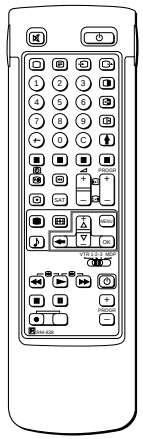
Note: Always remember to dispose of used batteries in an enviromental friendly way.

❸ Connect the aerial



Fit an IEC aerial connector attached to 75-ohm coaxial cable (not supplied) to the) socket at the rear of the TV.

Step 2 Tuning in to TV Stations



Once you have set up the TV, you can choose the language of the menu. Then, you should preset the channels (up to 100 channels) by choosing either the automatic or manual method. The automatic method is easier if you want to preset all receivable channels at once. Use the manual method if you only have a few channels and want to preset channels one by one.

Before you begin

- Check that the Full-Function side of the Remote Commander is visible.
- Locate Menu operation buttons on the Remote Commander. They are shaded in the illustration at the left.

❶ Choose a language

1 Press f on the TV.
The TV will switch on. If the standby indicator on the TV is lit, press 0 or a number button on the Remote Commander.

2 Press the MENU button.
The LANGUAGE menu appears. (See Fig. 1.)

MENU

3 Select the language you want with > + or ? – and press OK.

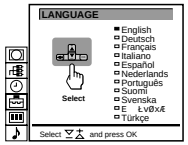
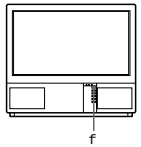


Fig. 1



❷ Display the menu

Press MENU.

The main menu appears. (See Fig. 2.)

Using > + or ? – select the symbol and press OK.

Now, choose one of the methods described overleaf:

"Preset Channels Automatically"

or

"Preset Channels Manually"

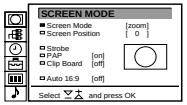


Fig. 2

To go back to main menu
Keep pressing @.

To go back to the normal TV picture
Press MENU. Normal TV picture will be restored after one minute if menu functions are not selected.

Note on the Demo function
If you choose Demo in the Installation menu, you can see a sequential demonstration of the menu functions.
Press MENU to stop the function.

3 Preset channels automatically

1 Select the symbol for “Preset” with >+ or ?– and press OK.
The PRESET menu appears. (See Fig. 3.)

2 Select “Auto Programme” with >+ or ?– and press OK.
The AUTO PROGRAMME menu appears. (See Fig. 4.)

3 Press OK.
Select if necessary the TV broadcast system (B/G for Western European or D/K for Eastern European countries) with >+ or ?– and press OK. The first element of the “PROG” number will be highlighted.

4 Select the programme (number button) from which you want to start presetting. Select the first element of the double-digit number with >+ or ?– or the number buttons (e.g., For “04,” select “0” here) and press OK.

The second element of “PROG” will be highlighted.

5 Select the second element of the double-digit number with >+ or ?– or the number buttons (e.g., For “04,” select “4” here) (See Fig. 5) and press OK.

6 Select “C” or “S” with >+ or ?– and press OK.
The automatic channel presetting starts.
When presetting is finished, the preset menu reappears. All available channels are now stored on successive number buttons.
Press menu to restore normal TV picture.

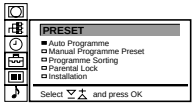


Fig. 3

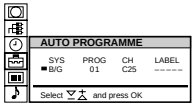


Fig. 4

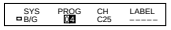


Fig. 5

To go back to the main menu
Keep pressing @.

To stop automatic channel presetting
Press @ on the Remote Commander.

Notes
- After presetting the channels automatically, you can check which channels are stored on which programme positions.
  For details, see “Displaying the Programme Table” on page 15.
- You can sort the programme positions to have them appear on screen in the order you like. For details, see “Sorting Programme Positions” on page 10.

3 Preset channels manually

Use this method if there are only a few channels in your area to preset or if you want to preset channels one by one. You may also allocate programme numbers to various video input sources.

If you have made a mistake
Press @ to go back to the previous position.

To return to the main menu
Keep pressing @.

To go back to the normal TV picture
Press MENU.

1 Select the symbol for “Preset” with >+ or ?– and press OK.
The PRESET menu appears. (See Fig. 6.)

2 Select “Manual Programme Preset” with >+ or ?– and press OK.
The MANUAL PROGRAMME PRESET menu appears. (See Fig. 7.)

3 Using >+ or ?–, select the programme position (number button) to which you want to preset a channel, and press OK.

4 Select, if necessary the TV broadcast system or a video input source (EXT)) with >+ or ?–.

5 Then press OK. The CH position will be highlighted. (See Fig. 8.)

6 Using >+ or ?–, select C (to preset a regular channel), S (cable channel) or F (to tune in by frequency) and press OK.
The first element of the “CH” number will be highlighted.
If you have selected EXT in step 5, select the video input source with >+ or ?–. (See Fig. 9.)

There are two ways to preset channels, If you know the channel number, go to step “7-Manual,”
or
If you don’t know the channel number, go to step “7-Search.”

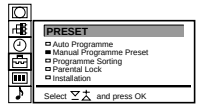


Fig. 6

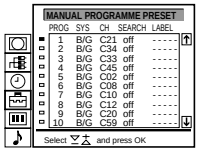


Fig. 7

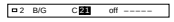


Fig. 8

7 *Manual*

-a Select the first element of the “CH” number with >+ or ?– or the number buttons and press OK.
The second element of the “CH” number will be highlighted.

-b Select the second element of the number with >+ or ?– or the number buttons.
The selected number appears. (See Fig. 10.)

-c Press OK
The “SEARCH” position is highlighted and the selected channel is now stored. (See Fig. 11.)

-d Press OK until the cursor appears by the next programme position.

-e Repeat steps 3 to 7 to preset other channels.

Fig. 9

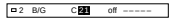


Fig. 10

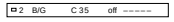


Fig. 11

7 *Search*

-a Press OK repeatedly until the colour of the SEARCH position changes.

-b Start searching for the channel with >+ (up) or ?– (down).
The CH position changes colour. (See Fig. 12.)
The CH number starts counting up or downwards. When a channel is found, it stops. (See Fig. 13.)

-c Press OK if you want to store this channel. If not, press >+ or ?– to continue channel searching.

-d Press OK until the cursor appears by the next programme position.

-e Repeat steps 3 to 7 to preset other channels.

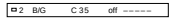
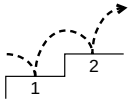


Fig. 12

Fig. 13

To tune in a channel by frequency
After selecting F in step 6, enter three digits using the number buttons.

Additional Presetting Functions



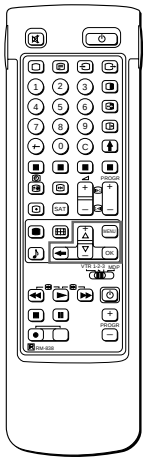
This section shows you additional presetting functions such as sorting or skipping programme positions, captioning a station name, manual fine-tuning, and using the parental lock.

Before you begin

- Check that the Full Function side of the Remote Commander is visible.
- Locate the Menu operation buttons.

Sorting Programme Positions

PROGRAMME SORTING



With this function, you can sort the programme positions to a preferable order.

1 Press MENU to display the main menu.

2 Select the symbol for "Preset" with >+ or ?– and press OK. The PRESET menu appears.

3 Select "Programme Sorting" with >+ or ?– and press OK. The PROGRAMME SORTING menu appears. (See Fig. 14.)

4 Using >+ or ?–, select the programme position you want to move to another and press OK.
The colour of the selected position changes. (See Fig. 15.)

5 Using >+ or ?–, select the programme position to which you want to move the channel of the programme position selected in step 4 and press OK. Now the programme positions have been sorted. (See Fig. 16.)

6 Repeat steps 4 and 5 to sort other programme positions.

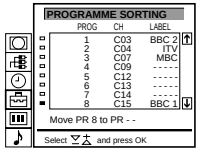


Fig. 14

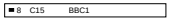


Fig. 15

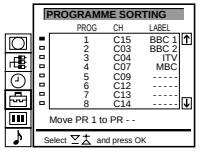


Fig. 16

For higher programme positions
The display scrolls automatically.

If you have made a mistake
Press @ to go back to the previous position

To go back to main menu
Keep pressing @.

To go back to the normal TV picture
Press MENU.

INSTALLATION

Using "Further Programme Preset"

Using the menu "further Programme Preset" you can

a) in case of a strong local aerial signal (striped picture) attenuate the signal individually for each programme position (RF attenuator).

b) individually adjust and store the volume level of each channel (Volume offset).

c) in case of a strong sound signal (distorted sound), attenuate the sound signal for each programme position.

d) use the manual fine tuning to obtain a better picture reception, if the picture is distorted. Normally the AFT (automatic fine tuning) is operating.

1 Press MENU to display the main menu.

2 Select the symbol for "Preset" with >+ or ?– and press OK. The PRESET menu appears.

3 Select "Installation" with >+ or ?– and press OK. The INSTALLATION menu appears.

4 Select "Further Programme Preset" with >+ or ?– and press OK. The FURTHER PROGRAMME PRESET menu appears (See Fig. 17).

5 Using >+ or ?– select the desired programme position and press OK once to select a) "ATT" (RF Attenuator), twice to select b) "VOL" (Volume offset), three times to select c) "IN-AMP" (Input Amplifier) or four times to select d) AFT (Automatic Fine Tuning). The selected item changes colour.

To adjust or change:

a) RF attenuator (ATT)
Using >+ or ?– select "On" for the selected programme position. Press OK to confirm the selection. Repeat step 5 to attenuate other programme positions.

b) Volume offset (VOL)
Using >+ or ?– you can adjust the volume level for the selected programme position within a range form –7 to +7.
Press OK to store the volume level.
Repeat step 5 to set the volume level for other programme positions.

c) IN-AMP (input amplifier)
Using >+ or ?– select "Off" for the selected programme position. Press OK to confirm the selection. Repeat step 5 to switch off the input amplifier for other programme positions.

d) AFT
Using >+ or ?– you can fine-tune the channel within a range from –15 to +15. Press OK to store the fine-tuned level. Repeat step 5 to fine-tune the other channels.

6 Press MENU to return to the normal TV mode.

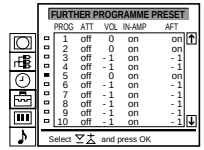


Fig. 17

To reactivate AFT (Automatic Fine Tuning)
Repeat from the beginnig and select "ON" in step 5.

MANUAL PROGRAMME PRESET

Skipping Programme Positions

You can skip unused programme positions when selecting programmes with PROGR +/– buttons. However, the skipped programmes may still be called up when you use the number buttons.

1 Press MENU to display the main menu.

2 Select the symbol for "Preset" with >+ or ?– and press OK.
The PRESET menu appears.

3 Select "Manual Programme Preset" with >+ or ?– and press OK.
The MANUAL PROGRAMME PRESET menu appears. (See Fig. 18.)

4 Using >+ or ?–, select the programme position which you want to skip and press OK.
The "SYS" position changes colour.

5 Press >+ or ?– until "– – –" appears in the SYSTEM position. (See Fig. 19.)

6 Press OK. (See Fig. 20.)
When you select programmes using the PROGR +/– buttons, the programme position will be skipped.

7 Repeat steps 4 to 6 to skip other programme positions.

If you have made a mistake
Press @ to go back to the previous position.

To go back to main menu
Keep pressing @.

To go back to the normal TV picture
Press MENU.

PROGR

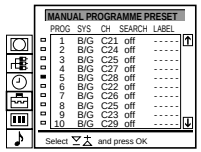


Fig. 18

Fig. 19

Fig. 20

Captioning a Station Name

Programme names are usually automatically taken from Teletext if available, You can also "name" a channel or an input video source using up to five characters (letters or numbers) to be displayed on the TV screen (e.g. BBC1). Using this function, you can easily identify which channel or video source you are watching.

1 Press MENU to display the main menu.

2 Select the symbol for "Preset" with >+ or ?– and press OK.
The PRESET menu appears.

3 Select "Manual Programme Preset" with >+ or ?– and press OK.
The MANUAL PROGRAMME PRESET menu appears. (See Fig. 21.)

4 Using >+ or ?–, select the programme position you want to caption and press OK repeatedly until the first element of the LABEL position is highlighted.

5 Select a letter or number with >+ or ?– and press OK.
The next element will be highlighted.
Select other characters in the same way. If you want to leave an element blank, select - and press OK. (See Fig. 22.)

6 After selecting all the characters, press OK repeatedly until the cursor appears by the next programme position (at the left margin).
Now the caption you chose is stored. (See Fig. 23.)

7 Repeat steps 5 and 6 to caption names for other channels.

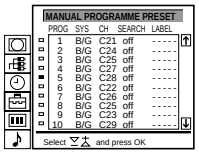


Fig. 21

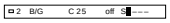


Fig. 22

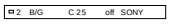


Fig. 23

PARENTAL LOCK

Parental Lock

You can prevent undesirable broadcasts from appearing on the screen. We suggest you use this function to prevent children from watching programmes which you consider unsuitable.

1 Press MENU to display the main menu.

2 Select the symbol for "Preset" with >+ or ?– and press OK.
The PRESET menu appears.

3 Select "Parental Lock" with >+ or ?– and press OK.
The PARENTAL LOCK menu appears. (See Fig. 24.)

4 Using >+ or ?–, select the programme position you want to block and press OK.
The symbol appears in front of the programme number indicating that this programme is now blocked. (See Fig. 25.)

5 Repeat step 4 to block other programme positions.

If you try to select a programme that has been blocked
The message "LOCKED" appears on the blank TV screen.

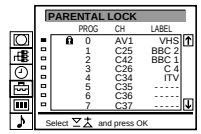


Fig. 24

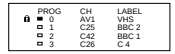


Fig. 25

Cancelling blocking

1 On the PARENTAL LOCK menu, select the programme position you want to unblock with >+ or ?–.

2 Press OK.
The symbol disappears indicating that the blocking has been cancelled.

Tuning in a Channel Temporarily

You can tune in to a channel temporarily, even when it has not been preset. Use the buttons on the Full-Function side of the Remote Commander.

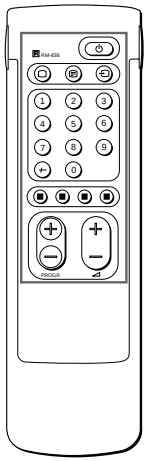
1 Press C on the Remote Commander. For cable channels, press C twice.
The indication "C" ("S" for cable channels) appears on the screen. (See Fig. 26.)

2 Enter the double-digit channel number using the number buttons (e.g. for channel 4, first press 0, then 4).
The channel appears.
However, the channel will not be stored.

Fig. 26

Operating Instructions

Watching the TV



If no picture appears when you depress f on the TV and if the standby indicator on the TV is lit, the TV is in standby mode.
Press 0 or one of the number buttons to switch it on.

This section explains the basic functions you use while watching TV. Most of the operations can be done using the simple side of the Remote Commander.

Switching the TV on and off

Switching on

Depress f on the TV.

Switching off temporarily

Press f on the Remote Commander.
The TV enters standby mode and the standby indicator on the front of the TV lights up in red.

To switch on again

Press 0, PROGR +/–, or one of the number buttons on the Remote Commander.

When the power is turned on again right after the power is turned off, the projection TV will enter standby mode with the f (standby) indicator flashing. After the set cools down, the power will come on.

Switching off completely

Depress f on the TV and indicator on the front of the TV lights up in amber.

Selecting TV Programmes

Press PROGR +/– or press the number buttons.

To select a double-digit number

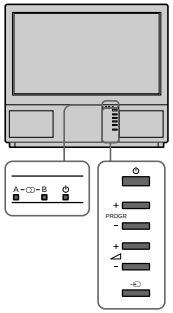
Press -/--, then the numbers.
For example, If you want to choose 23, press -/--, 2 and 3.

Adjusting the Volume

Press ⊿ +/–.

Operating the TV Using the Buttons on the TV

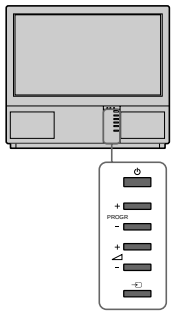
To select the programme number, press the PROGR +/– buttons.
To adjust the volume, press the ⊿ +/– buttons.
To select the video input picture, press the –⊂ button.
To reset picture and sound controls to the factory preset level (RESET function), press PROGR +/– buttons simultaneously.



Watching Teletext or Video Input

Watching teletext

1 Press _ to view the teletext.
2 For teletext operation, enter a 3-digit page number with the number buttons to select a page.
For fastext operation, press one of the coloured buttons.
For both operations, press V (PAGE +) for the next page or U (PAGE –) for the preceding page.
3 To go back to the normal TV picture, press 0 .

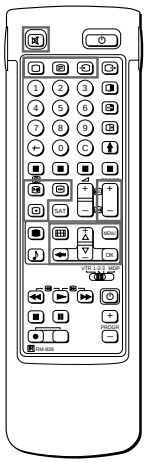


Watching a video input picture

1 Press –⊂ repeatedly until the desired video input appears.
2 To go back to the normal TV picture, press 0.

For details of the teletext operation, refer to page 20.

For details of the video input picture, refer to page 24.



More Convenient Functions

Use the Full-Function side of the Remote Commander.

Displaying the on screen indications

- Press $ once to display all the indications. They will disappear after a few seconds.
- Press $ twice to have the programme number and label stay on screen. Press twice again to make the indications disappear.

Muting the sound

Press o.
To resume normal sound, press o again.

Displaying the time

Press #. This function is available only when teletext is broadcast.
To make the time display disappear, press # again.

Displaying the Programme Table

Press OK. A Programme Table will be displayed on the left side of the TV screen. (See Fig. 27.)

Selecting TV programmes

Press PROGR +/– or select the desired programme position using >+ or ?– and press OK.

To make the Programme Table disappear, press MENU.

1	BBC
2	SAT
3	TV5
4	C02
5	C15
6	RTL
7	SKY
8	S34
9	AV1
10	MTV

Fig. 27

Freezing the Picture

When watching the TV you have the possibility to “freeze” the picture. Press ⏭. Press the button again to return to the normal TV picture.

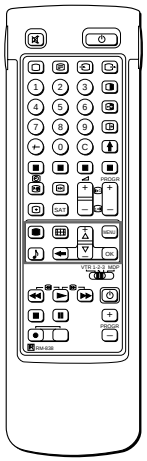
Changing the Screen format

Press ▦ repeatedly to change the Screen mode as follows:
4:3 (4:3 picture)
A Smart (imitation of 16:9 for 4:3 broadcast)
A Zoom (imitation of 16:9 for movies broadcast in cinemascopic format)
or
A Wide (for 16:9 broadcast).
See also page 19 for more information.

Adjusting and Setting the TV Using the Menu

PICTURE CONTROL

SOUND CONTROL



If you have made a mistake
Press @ to go back to the previous position.
To go back to the main menu
Keep pressing @.

Notes
- HUE is only available for NTSC colour systems.

When watching a video input source with stereo sound
You can select DUAL SOUND to change the sound.

Adjusting the Picture and Sound

Although the picture and sound are adjusted at the factory, you can adjust them to suit your own taste. You can also select dual sound (bilingual) programmes when available or adjust the sound for listening with the headphones. Also you have the possibility to adjust the sound to your individual taste using the Graphic Equalizer and special Sound effects.

1 Press ⬬ (for picture) or ♪ (for sound) on the Remote Commander.

or

Press MENU and select the symbol ▮▮▮ for Picture Control or ♪ Sound Control, then press OK.
The PICTURE CONTROL or SOUND CONTROL menu appears. (See Fig. 28 or Fig. 29.)

2 Using >+ or ?–, select the item you want to adjust and press OK.
The selected item changes colour. (See Fig. 30.)

3 Adjust the setting with >+ or ?– and press OK.
The cursor appears beside the next item (at the left margin). (See Fig. 31.)
For the effect of each control, see the table below.

4 Repeat steps 2 and 3 to adjust other items.

5 Press MENU to return to TV picture.

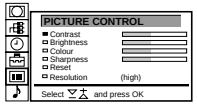


Fig. 28

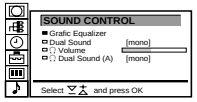


Fig. 29

Fig. 30

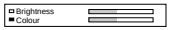


Fig. 31

Effect of each control

PICTURE CONTROL	Effect
Contrast	Less ⋯ More
Brightness	Darker ⋯ Brighter
Colour	Less ⋯ More
Hue	Greenish ⋯ Reddish
Sharpness	Softer ⋯ Sharper
RESET	Resets picture to the factory preset levels.
Resolution	Normal high: obtain a high quality picture

SOUND CONTROL	Effect
Graphic Equalizer	(See page 17 for more information)
Dual Sound	A: channel 1 B: channel 2 Stereo Mono
	The selected mode of the A-m-B indicator on the TV lights up.
Headphones: 🎧 Volume	Less ⋯ More
🎧 Dual Sound	A: channel 1 → B: channel 2 → PAP (if PAP is switched on you can select the PAP sound for the headphones)
	Stereo → Mono

Note: The modifications made in "USER" mode will be stored. All other settings are reset to factory-set level when you change to another mode.

TIMER

To switch off the timer
Select "OFF" in step 3.

To check the remaining time
Press $.

To go back to the normal TV picture
Press MENU.

Graphic Equalizer

Using this function you can individually adjust the sound by cutting and boosting selected frequencies. You can also select between the following modes:

Flat → Pop → Rock → Jazz → Vocal → User

1 Select "Sound Control" in the main menu, then select "Graphic Equalizer" using >+ or ?– and press OK.
The GRAPHIC EQUALIZER menu appears (See Fig. 32).

2 Press OK. The colour of "Mode" changes. Select the desired mode with >+ or ?– and press OK.

3 If you want to modify a mode, select the desired bar of a frequency band using >+ or ?– and press OK. The selected frequency changes colour. Using >+ or ?– adjust the level of frequency and press OK. In this way you can adjust all 5 graphic bars.

4 Press MENU to return to the normal TV mode.

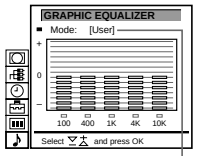


Fig. 32

Flat
Pop
Rock
Jazz
Vocal
User

Using the Sleep Timer

You can select a time period after which the TV automatically switches into standby mode.

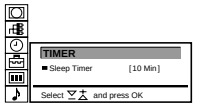
1 Using >+ or ?– select the symbol 🕘 for "Timer" and press OK.
The TIMER menu appears (see Fig. 33).

2 Press OK.
The time period option changes colour.

3 Select the time period with >+ or ?–.
The time period (in minutes) changes as follows:

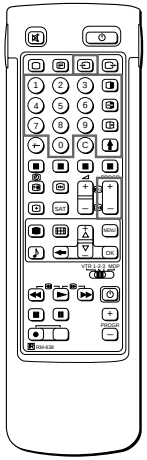
10 → 20 → 30 → 40 → 50 → 60 → 70 → 80 → 90

4 After selecting the time period, press OK.
The cursor moves back to the left margin and the timer starts counting.
One minute before the TV switches into standby mode, a message is displayed on the screen.



Fib. 33

PAP (Picture and Picture)



With this function you can display two screens at the same time. In this way you can watch two TV programmes at the same time. Also you can watch or monitor the video output from any connected equipment (for example from a VCR) while watching TV or vice versa. For information about connection of other equipment, refer to page 23.

Switching PAP on and off
Press ◨ to display the screens in 8:9 format.

The PAP screen will be displayed next to the main TV screen.

The PAP screen will come from the source chosen when the TV was last used.

To switch PAP off
Press ◨ repeatedly.

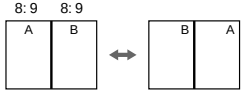
Selecting PAP source
Press ⬆.

The symbol ⬆ will be displayed at the bottom, left-hand corner of the screen.

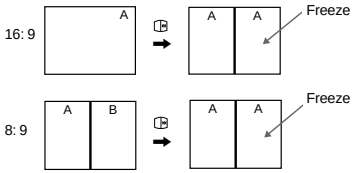
Press PROGR +/–, the number buttons or ⇨ to select the desired source for the PAP screen.

Swapping screens
Press ⇄.

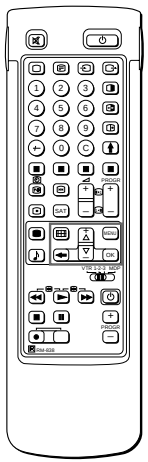
The main screen will switch the picture with the PAP screen.



Freezing the picture
You have the possibility to "freeze" the picture of the PAP screen. Press ⧉ once to freeze and twice to return to the normal screen.



Notes
- RGB input source cannot be displayed in PAP.
- PAP is not available in the Zoom mode.
- The sound of the right screen is only available via the headphones.
- The picture quality of the TV screen and PAP may differ.



When you want to select the screen mode
You can also select the screen mode by pressing the ▦ button on the Remote Commander.

Operating Screen Mode/PAP using the Menu

Using the Screen Mode menu you have the possibility to change the aspect ratio for the TV display for wide screen effects, operate the PAP Mode or reproduce the main picture image by image (Strobe function).

1 Press MENU to display the main menu.

2 Select the symbol ◰ for "Screen Mode" with >+ or ?– and press OK. The SCREEN MODE menu appears (See Fig. 34).

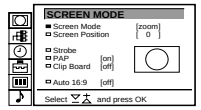


Fig. 34

You have the choice among the following modes:
4:3 for normal ratio 4:3 (See Fig. 35).
Smart: imitation of wide screen effect (16:9) for 4:3 broadcasts (See Fig. 36).
Zoom imitation of wide screen effect (16:9) for movies broadcast in cinemascopic format (See Fig. 37).
or
Wide: for 16:9 broadcasts (See Fig. 38).

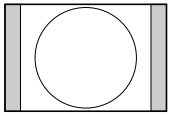


Fig. 35

a) Changing the Screen position (only for Zoom mode)
When using the Zoom mode part of the picture at the top and bottom will be cut off. With the help of the function "Screen position" you can move the screen up- or downwards in order to see the cut-off part of the screen (e.g., to read the subtitles).

Using >+ or ?– select "Screen position" and press OK. The selected item changes colour. Using >+ or ?– adjust the screen position and press OK.

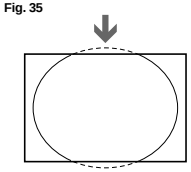


Fig. 36

b) Strobe Mode
Using >+ or ?– select "Strobe" and press OK. Now the TV picture is displayed image by image, creating a slow motion effect (See Fig. 39). Using >+ or ?– select the speed of the motion (3 different speeds are available). Press OK to return to the normal TV mode.

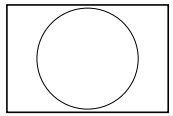


Fig. 37

c) Switching PAP on and off
Using >+ or ?– select "PAP" and press OK. Using >+ or ?– select "ON" to display the PAP screen in 8:9 format and "OFF" to switch if off and press OK.

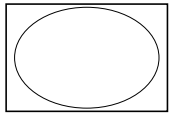


Fig. 38

d) Freezing the PAP screen
Using >+ or ?– select "Clip Board" and press OK.
Using >+ or ?– select "On" to freeze the PAP screen and "Off" to restore the normal picture.

Auto 16:9

If you preset Auto 16:9 to ON and the 16 : 9 format signal is being transmitted, the screen mode automatically changes from any mode to the 16 : 9 mode. When the 16 : 9 format programme is finished, the screen mode automatically returns to the previous mode.

1 Press MENU to display the main menu.

2 Select the symbol ◰ for "Screen Mode" with >+ or ?– and press OK. The SCREEN MODE menu appears.

3 Select "Auto 16:9" with >+ or ?– and press OK.

4 Select ON or OFF with >+ or ?– and press OK.

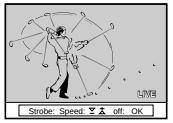
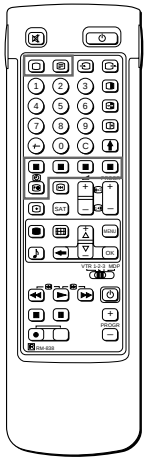


Fig. 39

Teletext



Note
Teletext errors may occur if the broadcasting signals are weak.

With the simple side of the Remote Commander
You can switch teletext on and off, operate Fastext, and directly select page numbers.

Note
Fastext operation is only possible, if the TV station broadcasts Fastext signals.

TV stations broadcast an information service called Teletext via the TV channels.Teletext service allows you to receive various information pages such as weather reports or news at any time you want. For advanced teletext operation, use the buttons on the Full-Function side of the Remote Commander.

Direct Access Functions

Switching Teletext on and off

1 Select the TV channel which carries the teletext broadcast you want to watch.

2 Press _ to switch on teletext.
A teletext page will be displayed (usually the index page).
If there is no teletext broadcast, "No text available" is displayed on the information line at the top of the screen.

To switch teletext off

Press 0.

Selecting a teletext page

With direct page selection

Use the number buttons to input the three digits of the chosen page number.
If you have made a mistake, type in any three digits. Then re-enter the correct page number.

With page-catching

1 Select a teletext page with a page overview (e.g. index page).

2 Press OK. Using >+ or ?–, select the desired page. "Page Catching" will be displayed on the information line. Press OK.
The requested page will appear in a few seconds.
Press _ to resume normal teletext reception.

Accessing next or preceding page

Press ⏮ (PAGE+) or ⏭ (PAGE-).
The next or preceding page appears.

Superimposing the teletext display on the TV programme

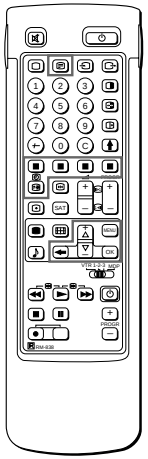
- Press _ once in teletext mode or twice in TV mode.
- Press _ again to resume normal teletext reception.

Preventing a teletext page from being updated

- Press [(HOLD). The HOLD symbol "[" is displayed on the information line.
- Press _ to resume normal teletext reception.

Using Fastext

With Fastext you can access pages with one key stroke.
When a Fastext page is broadcast, a colour-coded menu will appear at the bottom of the screen. The colours of this menu correspond to the red, green, yellow and blue buttons on the Remote Commander.
Press the corresponding coloured button on the Remote Commander which corresponds to the colour-coded menu. The page will be displayed after a few seconds.



Note
Some of the features may not be available depending on the teletext service.

Press OK to select "OFF" for the TIME PAGE setting to cancel the request.

Using the Teletext Menu

This TV is provided with a menu-guided teletext system. When teletext is switched on, you can use the menu buttons to operate the teletext menu. Select the teletext menu functions in the following way:

1 Press MENU. The menu will be superimposed on the teletext display. (See Fig. 40.)

2 Using >+ or ?–, select the teletext function you want and press OK. (See Fig. 41.)

USER PAGES/PRESET USER PAGES

See page 22 for information about presetting and operating the user pages.

INDEX

The index will give you an overview of the contents of the teletext and the page numbers.

TOP/BOTTOM/FULL

For convenient reading of a teletext page, you can enlarge the teletext display with the ability to scroll up and down. After having selected the function, an information line Top/Bottom/Full will be displayed. (See Fig. 42.)
Press >+ for "Top" to enlarge the upper half. For "Bottom" keep pressing ?–, to enlarge the lower half. Press OK for "Full" to resume the normal size.
Press _ to resume normal teletext reception.

TEXT CLEAR

After selecting the function, you can watch a TV programme while waiting for a teletext page to be captured. (The symbol changes colour.) (See Fig. 43.)
Press _ to resume normal teletext reception.

SUBTITLES

Your teletext service will inform you if a TV programme is subtitled. After having selected the function the subtitles will be displayed.

REVEAL

Sometimes pages contain concealed information, such as answers to a quiz. The reveal option lets you disclose the information. After having selected the function, an information line "REVEAL ON/OFF" will be displayed. (See Fig.44.)
Using >+ or ?–, select ON to reveal the information or OFF to conceal it again.
Press _ to resume normal teletext reception.

TIME PAGE

Your teletext service will inform you, if a time coded page is available. You may have a page (e.g., an alarm page) displayed at a certain time.

1 An information window will be displayed at the bottom of the page. Using >+ or ?– select "ON" and press OK.

2 To select the desired page, enter three digits for the page number (e.g., 452) using the number buttons.

3 To select the desired time, enter four digits for the desired time (e.g., 1800) using the number buttons. Press MENU.
The selected time is displayed at the top in the left-hand corner.
At the requested time, the page will be displayed.
Press _ to resume normal teletext mode.

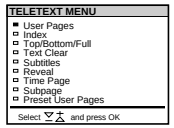


Fig. 40

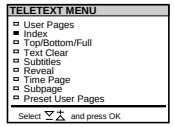


Fig. 41

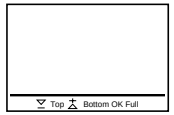


Fig. 42

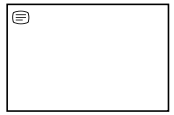


Fig. 43

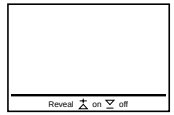


Fig. 44

To cancel the request
Select Subpage and press OK.

If two broadcasting stations use the same Teletext
You can preset one bank to 2 different programme positions.

SUBPAGE

You may want to select a particular teletext page from several subpages which are rotated automatically. After having selected the function, an information line will be displayed.

To select the desired subpage, enter four digits using PROGR +/– or the number buttons (e.g., enter 0002 for the second page of a sequence).

User Page Bank System

You can store up to 30 pages in the "Teletext page band system". In this way you have quick access to the pages you watch frequently.

Storing pages

There are 5 "banks" (A to E) for 5 teletext stations. In each bank you can store 6 preferred pages (P1 to P6).

1 Press _ (if Teletext is not on already) and MENU to show the TELETEXT MENU display.

2 Select PRESET USER PAGES with >+ or ?– and press OK.

3 Select the desired bank with >+ or ?– and press OK. The cursor will go to the first position (P1) of the preferred pages.

4 Input the three digits of your first preferred page with the number buttons and press OK.
The cursor will go to the second position.

5 Repeat step 4 for the other 5 page numbers you want to preset. If you do not want to preset all 6 page numbers available, press OK without inserting any number. After having finished the presetting press OK repeatedly until the cursor appears besides the next bank at the left margin.

6 Select Allocate Bank with >+ or ?– and press OK.

7 Select the programme position for which you have preset pages with >+ or ?– and press OK. (See Fig. 45.)

8 Select the desired bank with >+ or ?– (Banks A to E are available) and press OK.

9 Repeat steps 3 to 8 for the other 4 banks available.

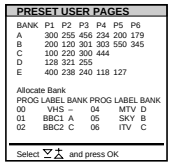


Fig. 45

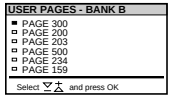


Fig. 46

Displaying User Pages

1 Select MENU.

2 Select User Pages with >+ or ?– and press OK.
A table of the stored preferred pages will be displayed. (See Fig. 46)

3 Select the desired page with >+ or ?– and press OK. The page will be displayed after some seconds.

or

You can use the coloured buttons on the Remote Commander to have quick access to the first four User pages. Page 1 corresponds to the red button, P2 to the green one, P3 to the yellow one and P4 to the blue button.

To select the desired page press the respective coloured button while you are in TV mode. Now the Page number of this teletext page will appear in white at the top in the left-handed comer of the TV screen. When the page number changes colour, the page is available. Press the coloured button again to display the page.

Connecting and Operating Optional Equipment

Connecting Optional Equipment

You can connect optional audio-video equipment to this TV such as a VCR, video disc player, and stereo system.

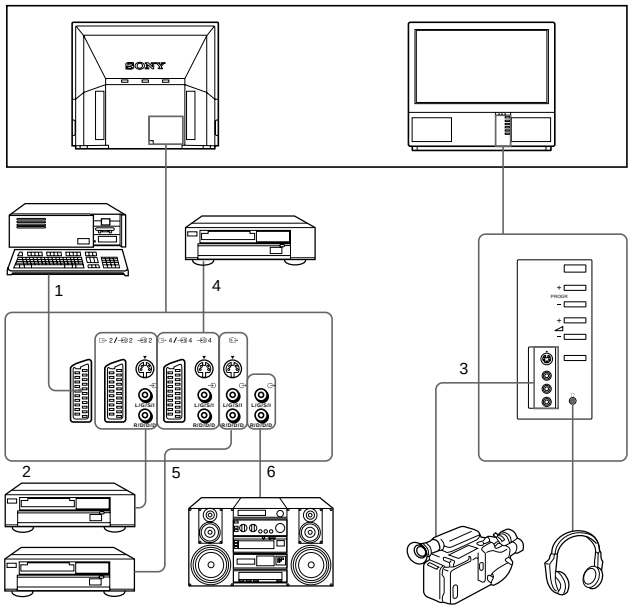
To connect a VCR using the) terminal
Connect the aerial output of the VCR to the aerial terminal) of the TV. We recommend that you tune in the video signal to programme number "0." For details see "Preset channels manually" on page 9.

If the picture or the sound is distorted
Move the VCR away from the TV.

S/video Input (Y/C input)
Video signals may be separated into Y (luminance or brightness) and C (chrominance) signals.
Separating the Y and C signals prevents them from interfering with one another, and therefore improves picture quality (especially luminance). This TV is equipped with 3 S Video input jacks through which these separated signals can be input directly.

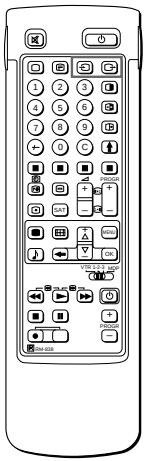
When connecting a monaural VCR
Connect only the white (L) jack to both the TV and VCR.

Note on playing video games:
Games that involve shooting at the screen with an electronic gun or similar device cannot be played with this TV.



	Acceptable input signal	Available output signal
1	Normal audio/video and RGB signal	Video/audio from TV tuner
2	Normal audio/video and S video signal	Video/audio from selected source
3	Normal audio/video and S video signal	No outputs
4	Normal audio/video and S video signal	Video/audio displayed on TV screen (monitor out)
5	No inputs	S/video/audio signal displayed on TV screen (monitor out)
6	No inputs	Audio signal

Selecting input with PROGR +/– or number buttons
You can preset video input sources to the programme positions so that you can select them with PROGR +/– or number buttons. For details, see “Preset channels manually” on page 9.



Selecting Input and Output

This section explains how to view the video input picture (of the video source connected to your TV), and how to select the output signal using direct access buttons or the menu system.

Selecting input

Press ⇢ repeatedly to select the input source.
The symbol of the selected input source will appear.

⇢ 1

To go back to the normal TV picture

Press 0.

Input modes

Symbol	Input signal
⇢ 1	Audio/video input through the ⇢ 1 connector
⇢	Audio/RGB input through the ⇢ 1 connector
⇢ 2	Audio/video input through the ⇢ 2/ ⇢ 2 connector
⇢ 2	Audio/S video input through the ⇢ 2/ ⇢ 2 or ⇢ 2 connector (4-pin connector)
⇢ 3	Audio/video input through ⇢ 3 and ⇢ 3 connector on the front
⇢ 3	S video input through the ⇢ 3 connector (4-pin connector) at the front
⇢ 4	Audio/video input through the ⇢ 4/ ⇢ 4 connector
⇢ 4	S video input through the ⇢ 4 / ⇢ 4 or ⇢ 4 connector(4-pin connector)

You can also select the input mode using the ⇢ button on the TV.

Selecting the output

The ⇢ 2 / ⇢ 2 connector outputs the source input from the other connectors.

Press ⇢ repeatedly to select the output.

The symbol of the selected output source appears.

1 ⇢

Output modes

Symbol	⇢ 2/ ⇢ 2 connector outputs
1 ⇢	Audio/video signal from the ⇢ 1 connector
2 ⇢	Audio/video signal from the ⇢2/ ⇢ connector
2 ⇢	Audio/S video signal from the ⇢2/ ⇢ 2 or ⇢ 2 connector (4 pin)
3 ⇢	Audio/video signal from the ⇢ 3, ⇢ 3 connectors
3 ⇢	Audio/S video signal from the ⇢ 3, ⇢ 3 connectors
4 ⇢	Audio/video signal from the ⇢ 4/ ⇢ 4 connector
4 ⇢	Audio/S video signal from the ⇢ 4/ ⇢ 4 or ⇢ 4 connector (4 pin)
TV ⇢	Audio/video signal from the) aerial terminal

Using AV Preset

Using this function you can preset the desired input source (e.g. ⇢ 1, RGB signal) to the respective AV input (AV 1 ⇢). In this way a connected VTR will automatically switch to the RGB signal.

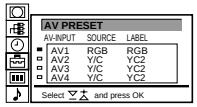


Fig.47

1 Select the symbol for “Preset” with >+ or ?– and press OK.
2 Select first “Installation”, then “AV Preset” with >+ or ?– and press OK.
The AV PRESET menu appears (See Fig. 47).
3 Select the desired AV input with >+ or ?– and press OK.
4 Select the desired source with >+ or ?– and press OK.
For the respective AV inputs you have the following possibilities:

AV1	RGB or AV	AV3	YC3 or AV
AV2	YC2 or AV	AV4	YC4 or AV

5 If you want to name the AV input select “Label” using >+ or ?– and press OK. Select a letter or a number with >+ or ?– and press OK. The next element will be highlighted. Select other characters in the same way. If you want to leave an element blank, select - and press OK.
After having selected all the characters, press OK repeatedly until the cursor appears by the next AV input at the left margin.
6 Repeat steps 3 to 6 for the other AV inputs.

Checking and selecting the input and output sources using the menu

You can display the menu to see which input sources are selected for the TV screen and PAP screen, and which output source is selected. You can also select them on the menu display.

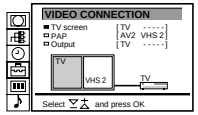
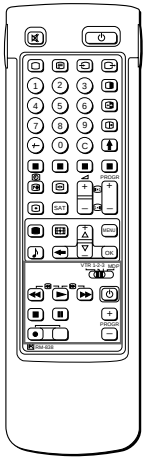


Fig. 48

1 Select the symbol for “Video Connection” with >+ or ?– and press OK. The VIDEO CONNECTION menu appears. (See Fig. 48)
You can see which source is selected for the TV and PAP input, and for the output. If you want to select the input and output on this menu, go on to the next step.
2 Select TV Screen (input source for the TV screen), PAP (input source for the PAP screen), or output (output source) with >+ or ?– and press OK. One of the source items changes colour.
3 Select the desired source with >+ or ?–.
For details about each source, see the table on page 24.
4 Press OK.
The selected source is confirmed, and the cursor appears.
5 Repeat steps 2 to 4 to select the source for other inputs or outputs.



When recording when you use the a (record) button, make sure to press this button and the one to the right of it simultaneously.

Remote Control of Other Sony Equipment

You can use the TV Remote Commander to control most of Sony remote-controlled video equipment such as: beta, 8 mm and VHS VCRs and video disc players.

Tuning the Remote Commander to the equipment

1 Set the VTR 1/2/3 MDP selector according to the equipment you want to control:

VTR1: Beta VCR
VTR2: 8 mm VCR
VTR3: VHS VCR
MDP: Video disc player

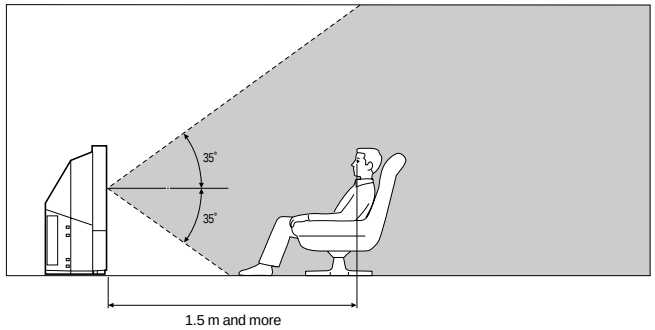
2 Use the buttons indicated in the illustration to operate the additional equipment.
If your video equipment is furnished with a COMMAND MODE selector, set this selector to the same position as the VTR 1/2/3 MDP selector on the TV Remote Commander.
If the equipment does not have a certain function, the corresponding button on the Remote Commander will not operate.

For Your Information

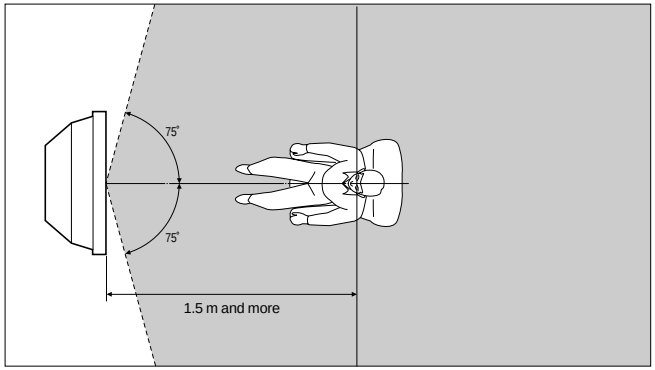
Optimum Viewing Area

For the best picture quality, try to position the projection TV so that you can view the screen from within the areas shown below.

Vertical viewing area



Horizontal viewing area



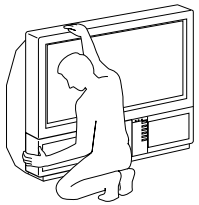
Cleaning of the Air Filter

Periodic cleaning of the air filter is necessary. Clean the air filter once a month. When the filter becomes old and dust remains on the filter even after cleaning, replace it with a new one.

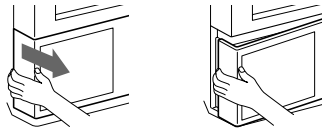
- Clean the air filter periodically. If you don't clean, it may cause internal heat build-up.
- Never use an air filter which is torn or has holes. Attach the filter firmly with six tabs. If dust enters the TV, the picture may become dark.

1 Turn off the power and disconnect the power cord.

2 Remove the front panel.

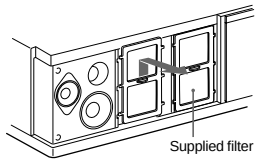


Remove the front panel without moving the TV.

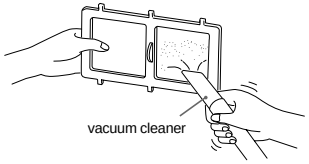


Grasping the side of the front panel with your fingers, pull it forward. Be careful not to catch your fingernails.

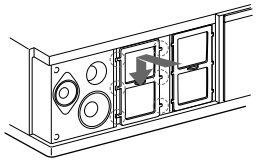
3 Pull the filter upward and remove it.



4 Clean the dust with a vacuum cleaner.



5 Attach the filter.
Attach the six tabs securely.



6 Attach the front panel.
Be careful not to damage the speaker.

Notes
- Attach the filter firmly. If it is not firmly attached, the power will not turn on.
- Remove the supplied filter in the same way as the attached filter.
- Consult your nearest Sony service center to obtain a new filter.

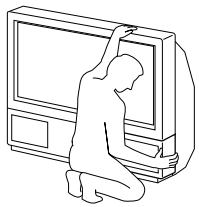
Replacing the Lamp

When the lamp becomes dark or the picture colour is not normal, replace with a new lamp.

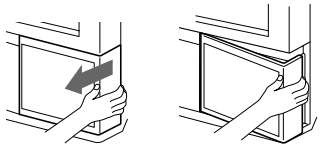
- Use the lamp XL-100E for replacement. If you use another lamp, it may cause damage to the TV.
- Do not remove the lamp except when replacing it.
- Before replacing the lamp, turn off the power and disconnect the power cord.
- Replace the lamp after it becomes cool. The front glass of the lamp remains 100 °C (212 °F) and more even 30 minutes after the power is turned off.
- Do not place the removed lamp in proximity to children or flammable material.
- Do not get the removed lamp wet, or insert objects inside the lamp. It may cause the lamp to explode.
- Do not place near metal or easily flammable objects, as this may cause fire. Also, do not put your hand inside the lamp compartment, as you may be burned.
- Attach the new lamp firmly. If it is not firmly attached, the picture may become dark.

1 Turn off the power and disconnect the power cord.
Replace the lamp 30 minutes or more after the power is turned off.
Prepare the new lamp.

2 Remove the front panel.

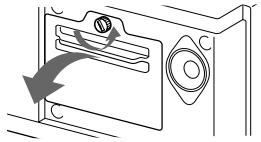


Remove the front panel without moving the TV.

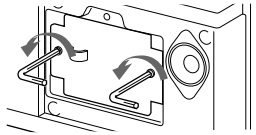


Grasping the side of the front panel with your fingers, pull it forward. Be careful not to catch your fingernails.

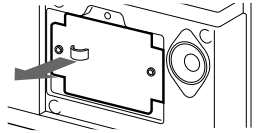
3 Loosen the screw with the object such as a coin and remove the lamp cover.



4 Loosen two screws and pull out the lamp.
The lamp is still too hot just after the power is turned off. Be careful that you don't touch the front glass or surrounding area of the lamp or the glass of the lamp compartment.



Loosen two screws with the supplied wrench.



Pull out the lamp by the handle.

5 Attach the new lamp.
Fasten two screws tightly.

6 Attach the lamp cover.
Fasten the screws tightly.

7 Attach the front panel.
Be careful not to damage the speaker.

Notes
- Do not touch or stain the front glass of the new lamp or the glass of the lamp compartment. If the glass become dirty, the picture quality may deteriorate or the lamp life may shorten.
- Attach the lamp cover firmly. If it is not firmly attached, the power will not turn on.
- When the lamp burns out, a noise is audible. This does not represent a damage.
- Consult your nearest Sony service center to obtain a new lamp.

Troubleshooting

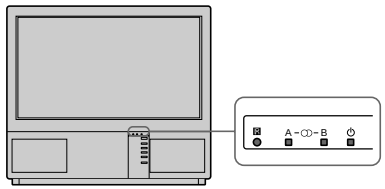
Here are some simple solutions to some problems which may affect the picture and sound.

Problem	Solution
No picture (screen is dark), no sound	• Plug in the TV in. • Press f on the TV (if f indicator is on, press 0 or a programme number on the Remote Commander). • Check the aerial connection. • Check if the selected video source is on.
Poor or no picture (screen is dark), but sound is OK	• Press ● to enter the PICTURE CONTROL menu and adjust the brightness, contrast and colour.
Poor picture quality when watching an RGB video source	• Press –⊙ repeatedly to select –⊙.
Good picture but no sound	• Press ◿ +. • If o is displayed on the screen, press o.
No colour for colour programmes	• Press ● to enter the PICTURE CONTROL menu, select RESET, then press OK.
Remote Commander does not function	• The batteries are weak.

If you continue to have problems, have your TV serviced by qualified personnel. Never open the casing yourself.

Warning Indicators

When a problem occurs, the indicator flashes as follows. Attempt the solution recommended for the given problem. When a problem occurs while operating the set, the f (standby) indicator flashes first and then warning will be indicated.



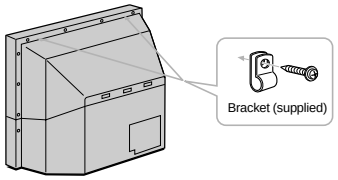
Cause	Indicator flashing patterns
The lamp burns out or the quality of the lamp is deficient.	The B indicator flashes twice then A flashes once. Flashing continues in this manner.
The cover of the filter or the lamp is removed.	The B indicator flashes three times then A flashes once. Flashing continues in this manner.
The fan for cooling stops.	The B indicator flashes four times then A flashes once. Flashing continues in this manner.
Internal heat builds up.	The B indicator flashes five times then A flashes once. Flashing continues in this manner.

If the lamp flashes in a way not described above, consult your nearest Sony service center.

Stabilizing the Projection TV

After setting up, secure the projection TV to a wall, etc., with the supplied brackets, for safety purposes.

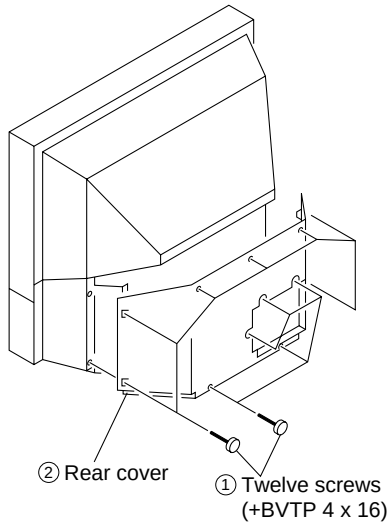
1 Mount the two supplied brackets with the screws to the upper rear side of the projection TV.



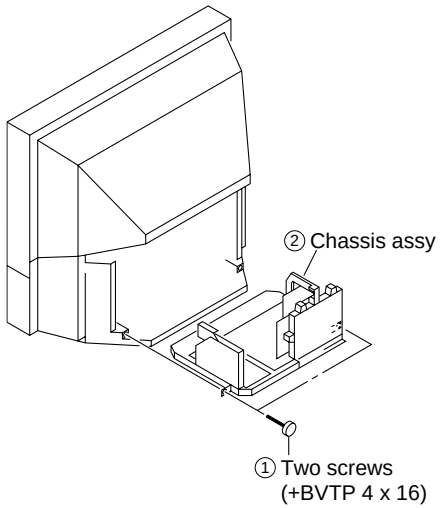
2 Pass a strong cord or a chain through each bracket mounted in 1, and then secure to a wall or a pillar, etc.

SECTION 2
DISASSEMBLY

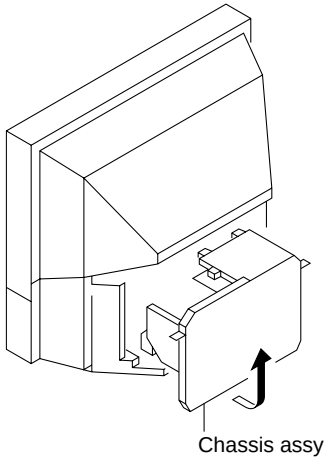
2-1. REAR COVER REMOVAL



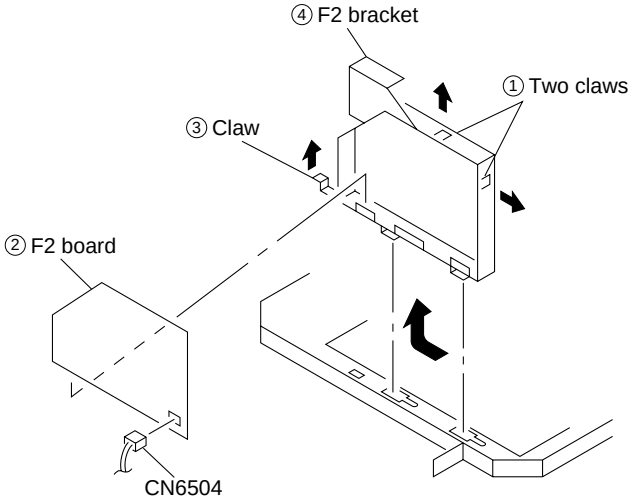
2-2. CHASSIS ASSY REMOVAL



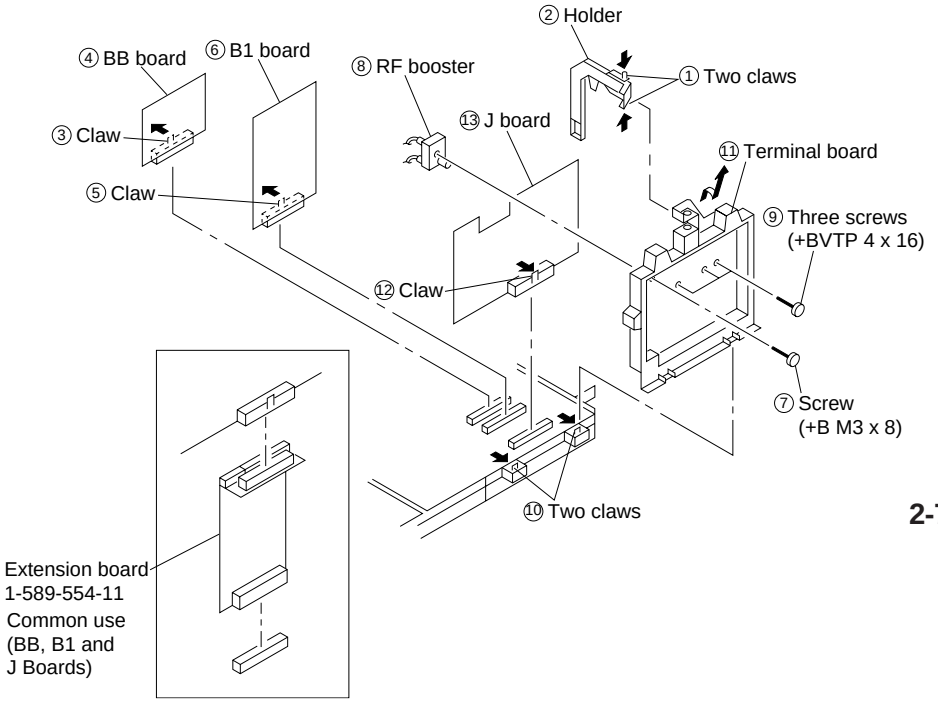
2-3. SERVICE POSITION



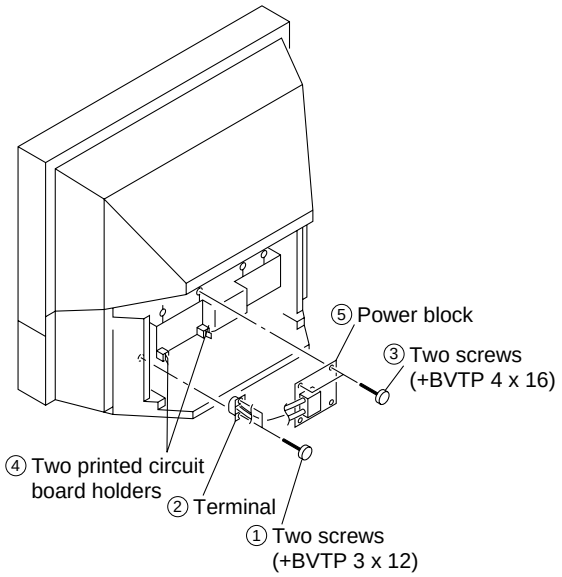
2-4. F2 BOARD AND F2 BRACKET REMOVAL



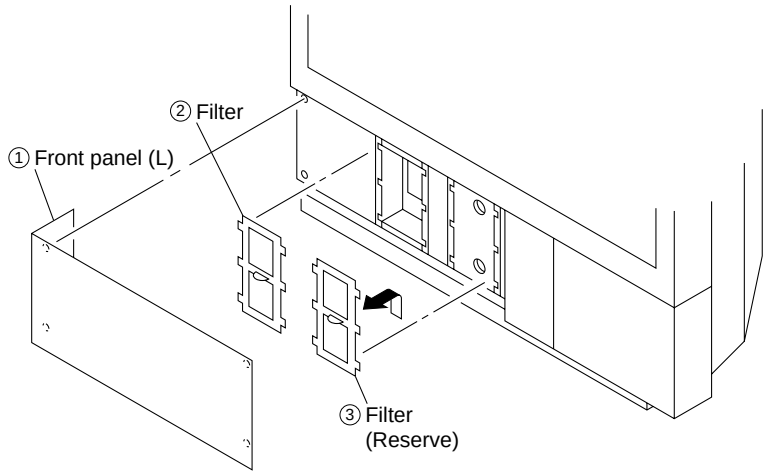
2-5. BB, B1 AND J BOARDS REMOVAL (EXTENSION BOARD)



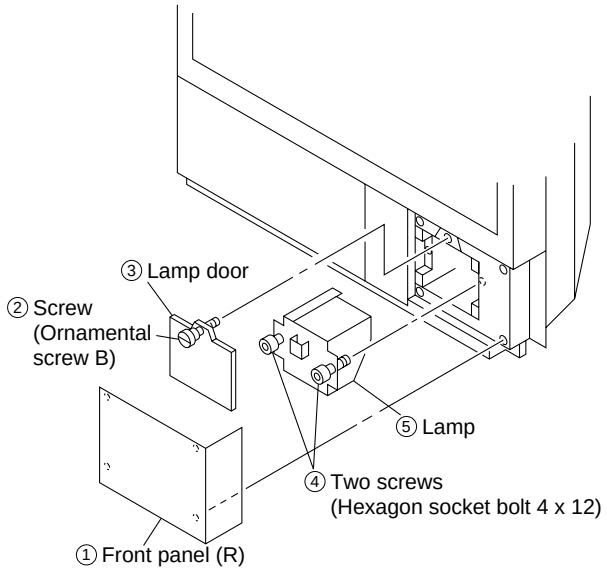
2-6. POWER BLOCK REMOVAL



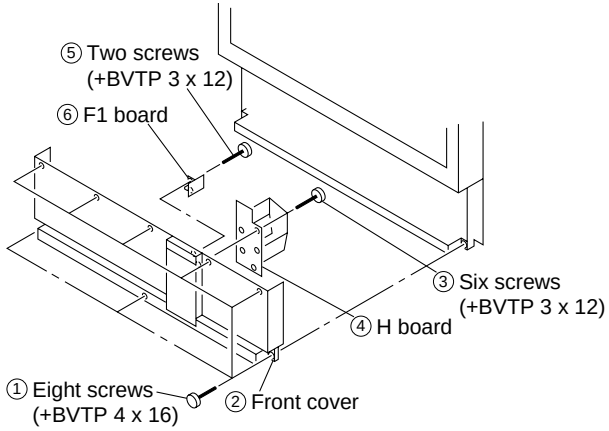
2-7. FILTER REMOVAL



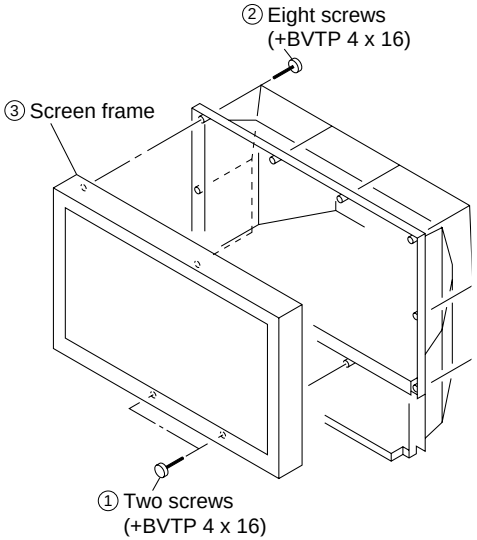
2-8. LAMP REMOVAL



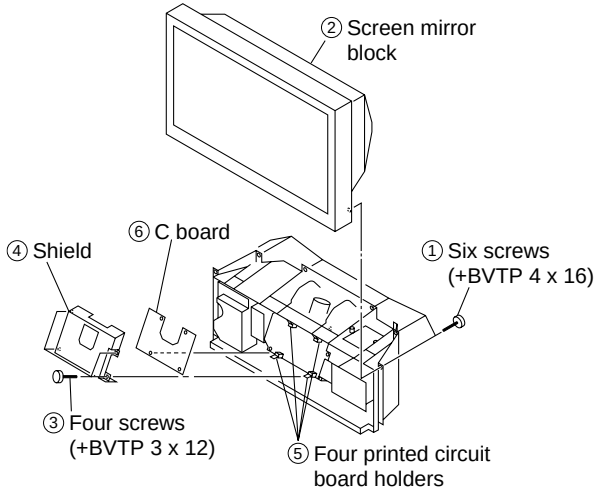
2-9. H AND F1 BOARDS REMOVAL



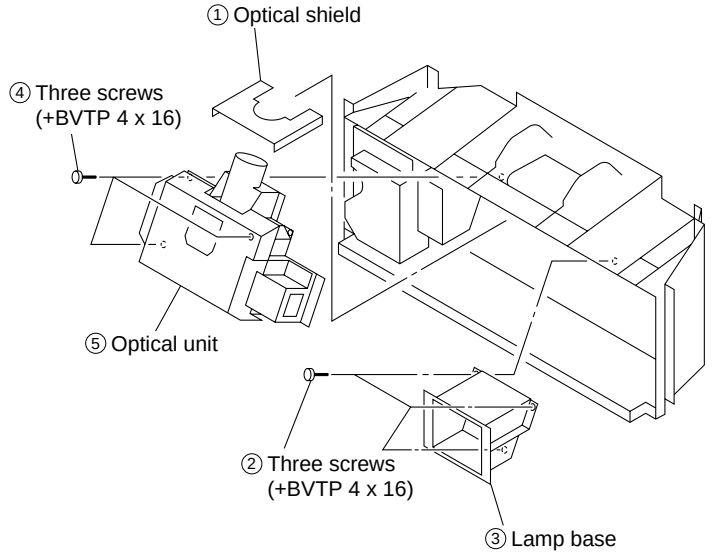
2-10. SCREEN FRAME REMOVAL



2-11. C BOARD REMOVAL



2-12. OPTICAL UNIT REMOVAL



SECTION 3
CIRCUIT ADJUSTMENTS

3-1. ELECTRICAL ADJUSTMENTS

Service adjustment to this model can be performed with the supplied remote commander, RM-838.

HOT TO ENTER INTO SERVICE MODE

1. Turn on the main power switch of the set while pressing the + (plus) and – (minus) buttons on the customer front panel.

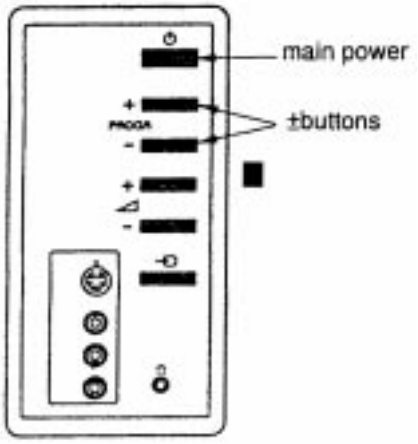


Fig. 4-1

2. "TT" will appear on the upper right corner of the screen.

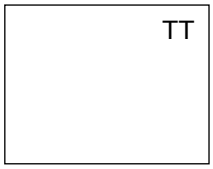


Fig. 4-2

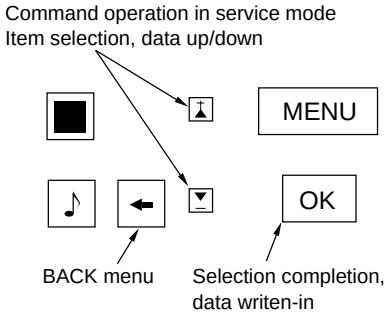
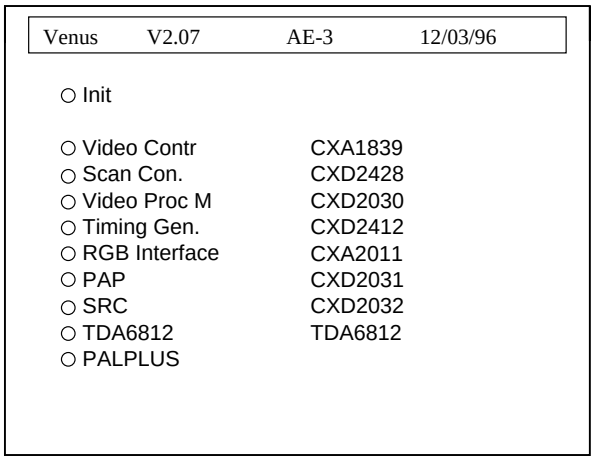


Fig. 4-3

3. Press 01 on the commander to get the menu on screen.



4. Press the ▲ and ▼ buttons on the remote commander to select the adjustment item.
5. Press the OK button to procced to the next menu.
6. If the adjustment item is Video cont press the ▼ button to move to Video cont then press OK button.
7. The Menu as indicated in Fig will appear on the screen.

Video Cont. CXA1839

Item No.	Adjustment item	Data Amount
1	Sub BRT	[6]
2	Sub COL1	[15]
3	Sub CON1	[15]
4	PIC	[53]
5	HUE	[31]
6	COL	[31]
7	BRT	[31]
8	SHP	[31]
9	Sub HUE	[6]
10	D COL	[off]
11	SHP Lim	[off]
12	Age WHT	[off]
13	R-Y R	[8]
14	R-Y B	[13]
15	G-Y R	[11]

8. Press the ▼ button to move > to the adjustment item and press the OK button.
9. Press the ▲ and ▼ buttons to change the data in order to comply with each standard.
10. Press the OK button to write data into memory.
11. Turn off the power to quit the service mode when adjustments have been completed.

Scan Converter CXD2428

Item No.	Adjustment item	Data Amount
1	H-shift	[126]
2	V-shift	[14]
3	H-phase	[58]
4	V-phase	[31]
5	H-SZ-RD (40h)	[140]
6	H-SZ-RD (50h)	[3]
7	H-SZ-WR (41h)	[140]
8	H-SZ-WR (51h)	[3]
9	LN-DAT0	[0]
10	MD-DAT0	[3]
11	LN-DAT1	[0]
12	MD-DAT1	[0]
13	LN-DAT2	[0]
14	MD-DAT2	[0]
15	LN-DAT3	[0]

Video Proc M CXD2030

Item No.	Adjustment item	Data Amount
1	DNR	[on]
2	DNR value	[5]
3	TA Sync C1p pls width	[16]
4	TB BGP position	[50]
5	TD CLP position	[25]
6	Foto CD SW	[off]
7	BLK porch pos	[16]
8	NTSC TD BGP pos	[25]
9	PAL TD BGP pos	[25]
10	Not Secam TB BGP pos	[50]
11	Secam TB BGP pos	[50]
12	358 NR Level	[3]
13	443 NR Level	[5]
14	Color detect Mode	[0]
15	Extern Y/C	[off]

RGB Interface CXA2011Q

Item No.	Adjustment item	Data Amount
1	Drive Level	[48]
2	Sig Sel	[0]
3	Sub Bright	[23]
4	Sync Sel	[0]
5	Sync SW	[3]
6	ABL SW	[off]
7	AKB-T	[off]
8	HD Sync	[on]
9	R Drive	[31]
10	G Drive	[31]
11	B Drive	[31]
12	R Cutoff	[124]
13	G Cutoff	[124]
14	B Cutoff	[123]
15	Gamma Level	[0]

TIMING GENERATOR CXD2412QA

Item No.	Adjustment item	Data Amount
1	SLSH1	[on]
2	SLSH2	[off]
3	SLSH3	[on]
4	BH Bias	[252]
5	RH Bias	[252]
6	BL Bias	[112]
7	RL Bias	[122]

PAP CXD2031

Item No.	Adjustment item	Data Amount
1	Main phase WR start	[52]
2	Sub phase WR start	[20]
3	Main RD start	[43]
4	Brightness sub	[8]
5	Twin pic	[on]
6	WR inhibit1	[off]
7	WR inhibit0	[off]
8	RD inhibit0	[off]

SRC CXD2032

Item No.	Adjustment item	Data Amount
1	YCD	[0]
2	YDF	[0]
3	COF	[0]
4	Reference clamp	[0]
5	Offset	[off]
6	IIR latch	[off]
7	BGP Sync SW	[0]
8	Clamp	[off]
9	50/60	[off]
10	Reference clamp	[32]
11	Offset Level	[0]
12	System Delay	[9]
13	Offset Level	[0]
14	FVSW	[on]
15	Mask SW	[on]

TDA 6812

Item No.	Adjustment item	Data Amount
1	Stereo-sep	[15]
2	Pre-Volume	[2]
3	Treble-offset L/R	[0]
4	Bass-offset L/R	[0]
5	Treble-offset C/S	[255]
6	Bass-offset C/S	

3-2. TEST MODE

Is available by pressing the Test button twice, OSD "TT" appears. The functions described below are available by pressing the two numbers. To release Test Mode 2, press 0, 10, 20...twice or switch the TV into Standby Mode. Pressing the two Local Control buttons (+ and –) during Power ON will also switch into "TT" mode.
In TT mode, it is possible to remove the Menu from the screen by pressing the Speaker Off button once. Pressing the Speaker OFF button a second time will cause the menu to reappear. The Function is kept even when the menu is not displayed!!

00	Switch back to normal mode - TT mode off
01	Switch service menu on
02	no function
03	Set Volume to 30 %
04	Service Menu in "Service Mode"
05	Service Menu in "Production Mode"
06	Set Volume to 80 %
07	Aging mode
08	Shipping condition (Production request) To ensure that all TV sets leave the Production with the same pressettings. Programme 1 is selected, AV IN is set to AV1, AV Out is set to TV Out, Volume and HP Volume is set to 35 %, Resolution is set to high, Format is set to 4:3, Pip is set to Top Left position, Pip is switched off, TT mode is switched off, all analogue values are set to the reset setting, space Sound - Equalizer - Loudness = off, DNR off, Dig. Mode = 1, Wide Zoom Mode for W28 models, Menu Language Reset, Prog. Pointer table reset Non Interlace is allowed in Text mode.
09	Language reset. With this function the Menu Language is set to "unselected" (NVM Bank OAAH Adress ODCH). The value for the Language Group is not overwritten (Selection West/East/Common). The Language Menu appears now automatically when the TV set is switched ON as long as no new language is selected.
10	The TT number will be deleted. All numbers with 0 (10, 20 30, 40, 50, 60, 70, 80, 90) will reset the TT number. A new number can be selected. TT display is kept
11	Direct access to Balance. With Cursor Up/Down the Balance can be controlled (w/o OSD, Menu display)
12	Direct access to Hue. With Cursor Up/Down the Hue can be controlled (w/o OSD, Menu display)
13	Display of Software Version and TV set configuration
14	Production Info Display
15	Read factory setting from ROM (Program code) and store this data at Last Power Memory data location (The previous last power memory data is overwritten) AE3 has 3 packages of Analogue data: 1. Last Power memory data. This data is sent continiously to the corresponding IC's (TDA1839, SC, TDA6812) with this data the TV picture/sound appears. 2. Reset data. By pressing "Reset" in the menu this data is transfered from Reset Data location to the Last Power data location in the NVM. That means the previous Last Power Memory Data is overwritten by the Reset data last Power memory and Reset data are now the same.

15	3. Factory fixed data. In the ROM code of the micro processor are also analogue datas which are fixed (ROM can't be changed)
16	Save actual Last Power Memory data at Reset Data location (The previous Reset data is overwritten)
15/16	With these two functions, it is possible to preset user defined Reset values (just TT16) or to preset factory defined Reset values (first TT15 then TT16)
17	This functions presets the Labels for the AV sources: The Labels are AV1, RGB, AV2, YC2, AV3, YC3, AV4, YC4.
18	Text possible On/Off selection of Text (toggle function)
19	Direct access to Stereo Separation With cursor Up/Down the Stereo separation can be adjusted (w/o OSD, Menu display)
20	see TT10
21	no function
22	Operating Timer and Error Monitor display
23	Direct access to Sub Brightness Adjustment With cursor Up/Down the Sub BRT can be adjusted (w/o OSD, Menu display)
24	Direct access to Sub Color. With Cursor Up/Down the Sub Color can be adjusted.
25	Status menu display (SubController, CXA1840 Status, Main Controller.)
26	Text Character set selection (Char set 06 -> West Europe)
27	Text Character set selection (Char set 38 -> East Europe)
28	Text Character set selection (Char set 40 -> West Europe) US English
29	Text Character set selection (Char set 55 -> West Europe) Turkish
30	see TT10
31	Increase V-Aperture
32	Decrease V-Aperture
33	no function
34	no function
35	no function
36	Mtx Register 112 = intern display clock
37	Mtx Register 112 = extern display clock
38	Automatic selection of Screen Modes: 4:3 -> Zoom -> Zoom up -> Zoom down -> smart -> wide.
39	Reset Programme Table (NVM Bank 0ACH) The sorting of programmes in "Programme Sorting Menu" is reset.
40	see TT10

41	Picture min
42	no function
43	no function
44	no function
45	Set NVM to Protect mode (Bank 0AEH Adr. 0FFH write with 0)
46	IR Channel Pressetting Mode. The channel pressetting can be done by a Special IR transmitter (Deatiled INFO about IR transmitter from SEC) Sequence: TT46 -> --PR Number select display appears Select Prog. No from where the channel shall be stored. --> Now TV is waiting for IR sequence <-- --> If no IR transmission starts TT46 is released after 20 secs <-- !Note: When TT46 is active, any transmission will be interpreted as PROG data !
47	Direct access to Headphone Source Selection with Cursor Up/Down the Source of Headphone can be selected (w/o OSD, Menu display)
48	no function
49	The EEPROM Testbyte is erased. After Power OFF -> ON the complete EEPROM data (exept channel tables) are overwritten. EEPROM Protection byte is set to 0 protection mode
50	see TT10
51	Strobo mode is activated.
52	no function
53	no function
54	no function
55	MTX Slicer Control “Low Pass” (only Sys L))
56	MTX Slicer Control “No Compensation”
57	Megatext Service Menu ON
58	MTX Small Framing Code Window
59	MTX Wide Framing Code Window
60	see TT10
61	no function
62	ACI disable.
63	ACI enable.
64	Reset all IIC Slave commands
65	Reset stored error codes in NVM.
66	Reset for Sub Controller.
67	Direct access to Headphone Volume. With cursor Up/ Down the Headphone volume can be controlled (w/o OSD, menu display)
68	ignore errors.
69	reset ignore errors (show errors)
70	see TT10
71	Picture Rotation Function On/Off toggle.
72	no function
73	Megatext RGB textlevel one step decreased
74	Megatext RGB textlevel one step decreased
75	reserved for TT command Network ID, not inplemented yet
76	CXD2030 Default data setting.
77	CXD 2031 Default data setting.
78	CXD 2032 Default data setting.
79	CXD 2428 Default data setting.
80	see TT10
81	Default data setting CXA2011
82	no function
83	no function
84	CXA 1839 Default data setting
85	Default data setting CXD 2412
86	no function
87	Default data setting CXD 2030
88	Text character set Russian/East
89	Text character set Russian/West
90	see TT10

3-3. ERROR MONITOR AND DETECTION

In the menu 'Error Monitor', information about the error status of the set is displayed.

- Actual operating time
- Last five errors which are stored in the NVM
- Actual error

Erroe Monitor

Operating Time
000355 h 35min

Saved Errors
1. 40h=D1 Board
2. 60h=Q Board
3. 70h=T Board
4. 00h=no error occured
5. 00h=no error occured

Actual Error
-> 00h=no error occured

to reset the NVM press 'TT' 65

Additionally the Error Reader can be connected to the service connector to read out the actual errors.

The device check itself is active while the TV set is running out of stand-by mode. The devices are checked by sending an I^2C start sequence and if there is no acknowledgement back from the devices it is regarded as an error. Each device is checked three times and if at every attempt there is no reply from the relevant device an error is given. To read the error codes press 'TT' followed by 22 on the commander to view the Error Monitor menu.

To reset the error codes in the NVM press 'TT' followed by 65 on the remote commander.

TABLE OF ERROR CODES

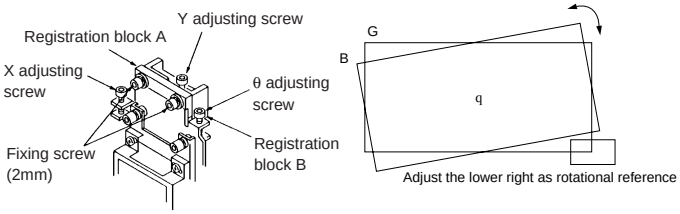
Error Code	Device	Description	Board
000h	no device	no error has occured	–
001h	IIC 1 and IIC 2	IIC 1 and IIC 2 blockaded	–
002h	IIC 1	IIC 1 is blockaded	–
003h	IIC 2	IIC 2 is blockaded	–
010h	A Board	A Board is defective	–
020h	A1 Board	A1 Board is defective	–
030h	BX-Board (B, B1, B2)	B, B1, or B2 Board is defective	–
040h	D1 Board	D1 Board defect	–
050h	J Board	J Board defect	–
060h	Q Board	Q Board defect	–
070h	T Board	T Board defect	–
011h	CXP85332	No response from the Subcontroller	A
012h	ST24C16	No response from the NVM	A
013h	SDA5273	No response from the Megatext IC	A
014h	TDA6812	No response from the Sound Processor	A
015h	SAA7283	No response from the Nicam Decoder	A
016h	UV916H	No response from the Main Tuner	A
017h	CXA1839Q	No response from the Video Controller	A
018h	CXA1840	No response from the CRT Driver	A
019h	RGB8443	No response from RGB/ YUV	A
021h	TDA6622	Audio processor of the Center and Surround channel in the case of Dolby Prologic does not respond.	A1
022h	TDA7317	No reponse from the Equalizer.	A1
031h	CXD2030R	No response from the Digital Video Processor.	B/B1
032h	CXD2031R	No response from the Twin Picture IC.	B1
033h	CXD2032R	No response from the Digital Sampling Rate Converter.	B/B1
034h	CXD2033R	No response from the Picture in Picture IC.	B
035h	CXD2035R	No response from the Aspect Converter.	B/B1
036h	TDA9160	No response from the Chroma Decoder.	B/B1
037h	TDA9145	No response from the Chroma Decoder (on French models only.)	B2
041h	CXA1526	No response from the Convergence IC.	D1
051h	CXA1855	No response from the AV-Switch	J
061h	83C65202	No response from the Local Controller.	Q
071h	UV1316/ TSA5526	No response from the Subtuner.	T
072h	CXA1875	No response from the Port Expander.	T

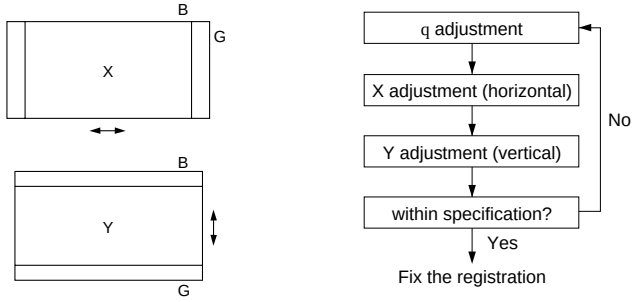
3-4. REGISTRATION ADJUSTMENT

Preparation
- Aspect ratio 16:9
- Image quality adjusting menu ..... Standard

Note: In adjusting the registration, the registration fixing block is secured with an adhesive, and therefore the PANEL BLOCK ASSY is required.
  - Tools and Kit
    Hex. wrench keys (2 mm, 1.5 mm)
    PANEL BLOCK ASSY (Refer to SECTION 5. EXPLODED VIEWS)

1. Entering G monochrome crosshatch signal or B monochrome crosshatch signal, adjust the registration between B and G. Overlay B image on the G image as shown, while turning the registration adjusting screws in the order of θ → X → Y.
2. Enter full black signal to the B panel, then the R monochrome crosshatch signal to adjust the registration of R and G.
3. Tighten tentatively the registration fixing screws on the R and B panels, and secure the registration blocks A and B with an adhesive.
4. Tighten the registration fixing screws.





LENS FOCUS ADJUSTMENT

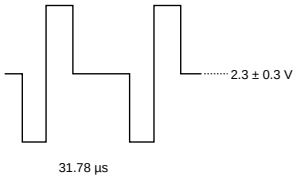
1. Loose screw of LENS focus.
2. Adjust LENZ focus so that best focus.

3-5. C BOARD ADJUSTMENT

1. PLL f0 Adjustment

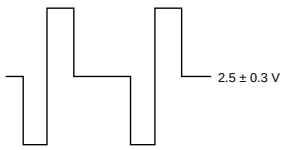
(1) WIDE Mode
  1) Change to "WIDE Mode".
  2) Input to monoscope signal.
  3) Change "H. SYNC input" CN5202 1pin input to open (no signal).
  4) Connect 100 Ω resister between 2pin of IC5004 and TP5009, then connect frequency counter to 1pin of IC5004.
  5) Turn L5002 and adjust to 13.67 ± 0.1 MHz.
  6) Input H. SYNC for PAL double speed.
  7) Confirm that the waveform for TP5007 <RPD2> shall be Fig.

13.67 ± 0.1 MHz



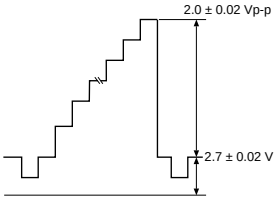
(2) 4.3 Mode
  1) Change to "4 : 3 Mode".
  2) Input to monoscope signal.
  3) Change H. SYNC CN5202 1pin input to open (no signal).
  4) Connect 100 Ω resister between 2pin of IC5004 and TP5009, then connect frequency counter to 1pin of IC5004.
  5) Turn L5004 and Adjust to 10.22 ± 0.05 MHz.
  6) Input H. SYNC for PAL double speed.
  7) Confirm that the waveform of TP5004 <RPD1> shall be Fig.

10.22 ± 0.05 MHz



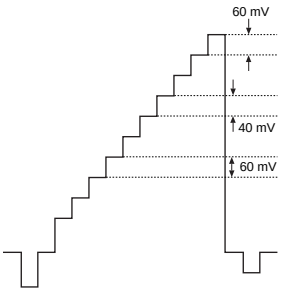
2. r curve adjustment

(1) Change to "WIDE Mode".
(2) Input PAL double speed signal 10 step.

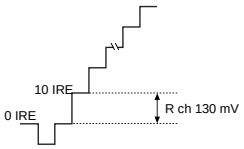


(3) R ch

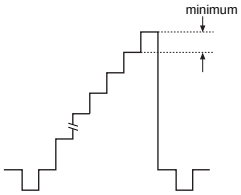
1) Connect Oscilloscope to TP5201 <R>.
2) Add 2.25 ± 0.02 V to TP5211 <RLBS>
   3.95 ± 0.02 V to TP5210 <RHBS>
   by DC power supply.
3) Confirm that the signal level under 10 IRE and above 80 IRE is increased with above condition.



4) Adjust RV5201 <RL, GAIN> so that signal level of "0 IRE ~ 10 IRE" might be 130 ± 10 mV.



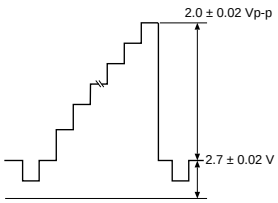
5) Turn RV5209 <RH GAIN> to the left direction by aplox 150° and adjust so that "90 IRE ~ 100 IRE" might be minimum.



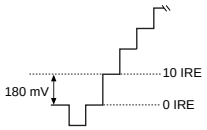
(In Case that "100 IRE ~ GND" is above 3.7 V ; Adjustment is N.G)

(4) G ch

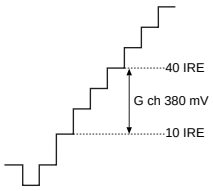
1) Connect Oscilloscope to TP5401 <G>.
2) Add 2.25 ± 0.02 V to TP5411 <GLBS>
   3.95 ± 0.02 V to TP5410 <GHBS>
   by DC power supply.
3) Confirm that the signal level under 10 IRE and above 90 IRE is increased with above condition.



4) Turn RV5401 <GL, GAIN> to the right direction and adjust so that "0 IRE ~ 10 IRE" might be 180 ± 10 mV.

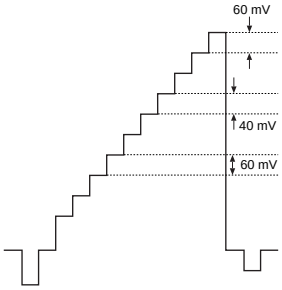


5) Change TP5411 <GLBS>, TP5410 <GHBS> to OPEN.
6) Turn RV5402 <GL, BIAS> to the left direction and adjust so that "10 IRE ~ 40 IRE" might be 380 ± 10 mV.

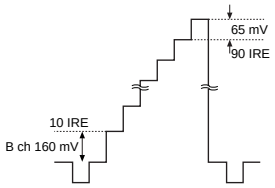


(5) B ch

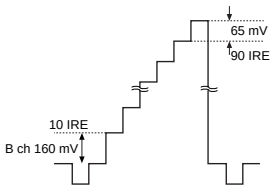
1) Connect Oscilloscope to TP5601 <B>
2) Add 2.20 ± 0.02 V to TP5611 <BLBS>
   3.95 ± 0.02 V to TP5610 <BHBS>
   by DC power supply.
3) Confirm that the signal level under 10 IRE and above 80 IRE is increased with above condition



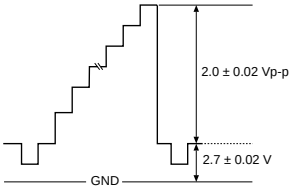
4) Turn RV5601 <BL, GAIN> to the right direction and adjust so that "0 IRE ~ 10 IRE"might be "160 ± 10 mV"



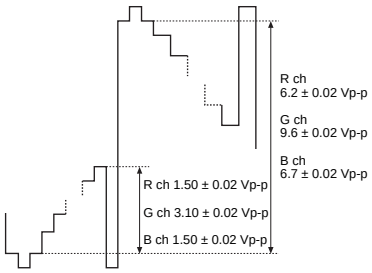
5) Turn RV5609 <BH, GAIN> and adjust so that "90 IRE ~ 100 IRE" might be "65 ± 10 mV"
(RV5609 can be adjusted at mechanical center of the VR to obtain above metioned condition. In case that "100 IRE ~ GND" is above 3.7 V Adjustment is N.G)



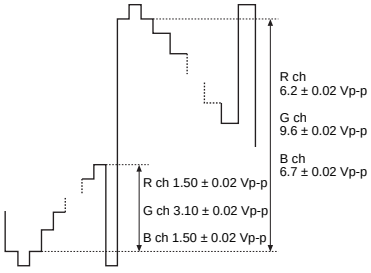
(6) IC level adjustment (R ch)
1) Change to "WIDE Mode".
2) Input PAL double speed signal 10 step waveforms.



3) Add 0 V to TP5211 <RLBS> and 9 V to TP5210 <RHBS> by DC power supply.
4) Adjust the level by RV5205 <R-GAIN> as "0 IRE ~ 100 IRE" on TP5203 <R-sig2> is 1.50 ± 0.02 Vp-p.

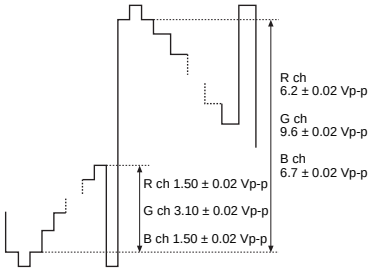


5) Adjust by RV5206 <R-BIAS> so that "Positive polarity 0 IRE ~ Negative polarity 0 IRE" might be 6.2 ± 0.02 Vp-p.



6) By RV5203 <R-S, GAIN1>, RV5207 <R-S, BIAS1>, adjust the waveform for TP5202 <R-sig1> to the waveform TP5203 <R-sig2>. (within ± 0.02 V)

7) By RV5204 <R-S, GAIN2> & RV5208 <R-S, BIAS2>, adjust the waveform for TP5204 <R-sig3> to the waveform for TP5203 <R-sig2>. (within ± 0.02 V)



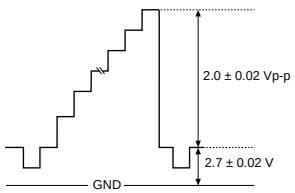
8) Confirm that the waveform for TP5203 <R-sig2> is within standard mentioned.

(7) IC Level Adjustment (G ch)
1) Proceed 4) ~ 8) by the same way as R ch.
2) Proceedure 3) to add external voltage must not be done.
As for "related VR" and "output terminal" please refer to the Fig.

(8) IC Level Adjustment (B ch)
1) Proceed 3) ~ 8) by the same way as R ch.
As for "related VR" and "output terminal" please refer to the Fig.

	R ch	G ch	B ch
-Sig 1	TP5202	TP5402	TP5602
-Sig 2	TP5203	TP5403	TP5603
-Sig 3	TP5204	TP5404	TP5604
LBS	TP5211	TP5411	TP5611
HBS	TP5210	TP5410	TP5610
-GAIN	RV5205	RV5405	RV5605
-BIAS	RV5206	RV5406	RV5606
-S.GAIN 1	RV5203	RV5403	RV5603
-S.BIAS 1	RV5207	RV5407	RV5607
-S.GAIN 2	RV5204	RV5404	RV5604
-S.BIAS 2	RV5208	RV5408	RV5608

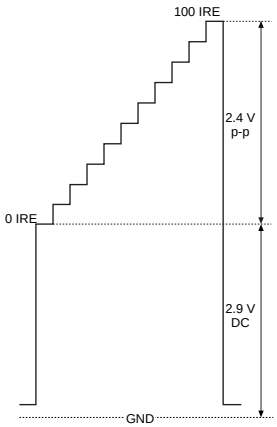
(9) V com Adjustment
1) Change to "WIDE Mode".
2) Input PAL double speed signal 10 steps waveform.



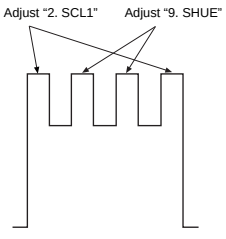
3) Measure the voltage on TP5203 (R ch out).
4) Adjust RV5211 <RVCOM> so that the voltage on TP5205 <R-V comout> might be – 0.6 V ± 0.02 V.
5) Measure the voltage on TP5403 (G ch out).
6) Adjust RV5411 <GVCOM> so that the voltage on TP5405 (G-V com out) might be – 0.5 ± 0.02 V.
7) Measure the voltage on TP5603 (B ch out).
8) Adjust RV5611 <BVCOM> so that the voltage on TP5605 <R-V com out> might be – 0.8 V ± 0.02 V.

3-6. A BOARD ADJUSTMENT

(1) Pre-adjustment on "2G" output level.
1) Change following two data as follows.
CXA1839 "22 DC Tran" 1 → 0
"23 Dyn PIC" 2 → 0
2) Input 10-step swaveform on 1 Vpp (75Ω terminated value) to Video 1 input.
3) Set picture control to RESET.
4) Adjust CXA1839Q "3. Sub-CON1" so that the level from 0 IRE to 100 IRE on TP1002 "2G" can approach to 2.4 Vp-p the most.
5) Adjust CXA1839Q "1. Sub-BRT" so that the level of 0 IRE on "2G" can approach to 2.9 Vdc the most.

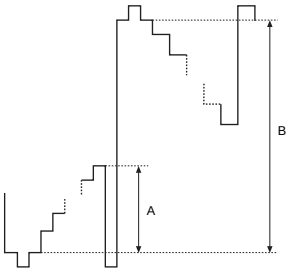


(2) HUE, COLOR Adjustment
1) Input 75 % full field color bar to Video INPUT 1.
2) Adjust CXA1839Q "2. Sub COL1" so that the peak level for 2 pulse on both right and left side on TP1003 "2B" can be equal.
3) Adjust CXA1839Q "9. Sub HUE" so that the peak level of 2 pulse in the center on "2B" can be equal.
4) Return following two data.
CXA1839 "22 DC Tran: 0 → 1
"23 Dyn PIC: 0 → 1



3-7. SUB BRT, SUB PIX ADJUSTMENT

(1) Sub BRT Adjustment
1) Input 10 step signal to Video, 1 picture mode: smart
Setup as follows
PIX = 90 %
COL = 50 %
BRT = 50 %
SHP = 50 %
2) Change two data as follows.
CXA1839 "22 DC Tran"1Æ0
"23 Dyn PIC" 2Æ0
3) Connect Oscilloscope to TP5403.
4) Adjust B with CXA2011 "3. Sub Bright" as 8.2 V ± 0.02 V.
5) Adjust A with CXA2011 "1. Drive Level" as 2.9 V ± 0.02 Vpp.
6) Return following data as follows.
CXA1839 "22 DC Tran" 0 → 1
CXA1839 "23 Dyn PIC" 0 → 2



3-8. WHITE BALANCE ADJUSTMENT

1) Keep set with aging condition more than 15 min.
2) Change to following data.
CXA1839 "22 DC Tran" → 0
"23 Dyn PIC" → 0
CXD2412 "6. BL Bias" → 00
"7. RL Bias" → 00
3) Input 30 IRE flat field signal.
4) Adjust CXA2011 "12R cutoff" and "14B cut off" can be within standard. (CXA2011 "13G cutoff" so that cutoff white balance should be fixed to 124.)

Standard

X = 0.2952 with in 4JND

Y = 0.3047

5) Input 70 IRE flat filed signal.
6) Adjust CXA2011 "9R Drive" and "11B Drive" so that high light can be within standard. (CXA2011 "10G Drive" should be fixed by "31")

Standard

X=0.2952

Y=0.3047 with in 5JND

7) Repeat 3)~6) and trucking and adjust so that both 30 IRE, 70 IRE is within standard.

8) Input 20 IRE flat fild signal.
9) Adjust with CXD2412 “7. RL Bias” or “6. BL Bias” so that can approach to adjusting center the most.

   Adjustment Center

   X=0.2952

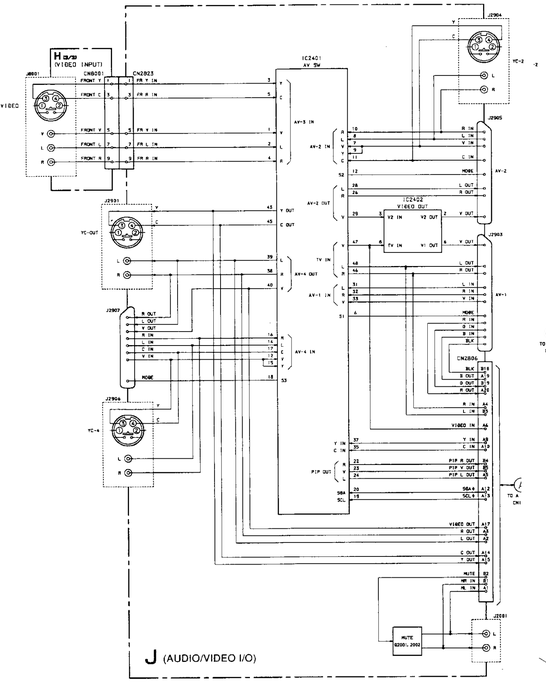
   Y=0.3047

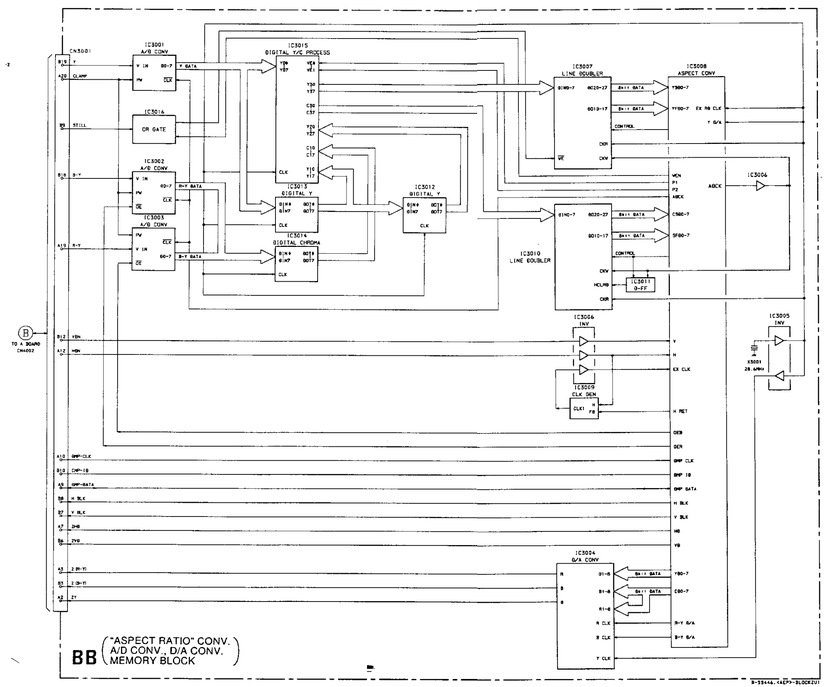
10) Return following two data.
    CXA1839 “22. DC Tran” → 0
    “23. Dyn PIC” → 2
11) Confirm that color from 0 to 100 IRE each steps on the screen should be uniform and it does not differ much from other part.

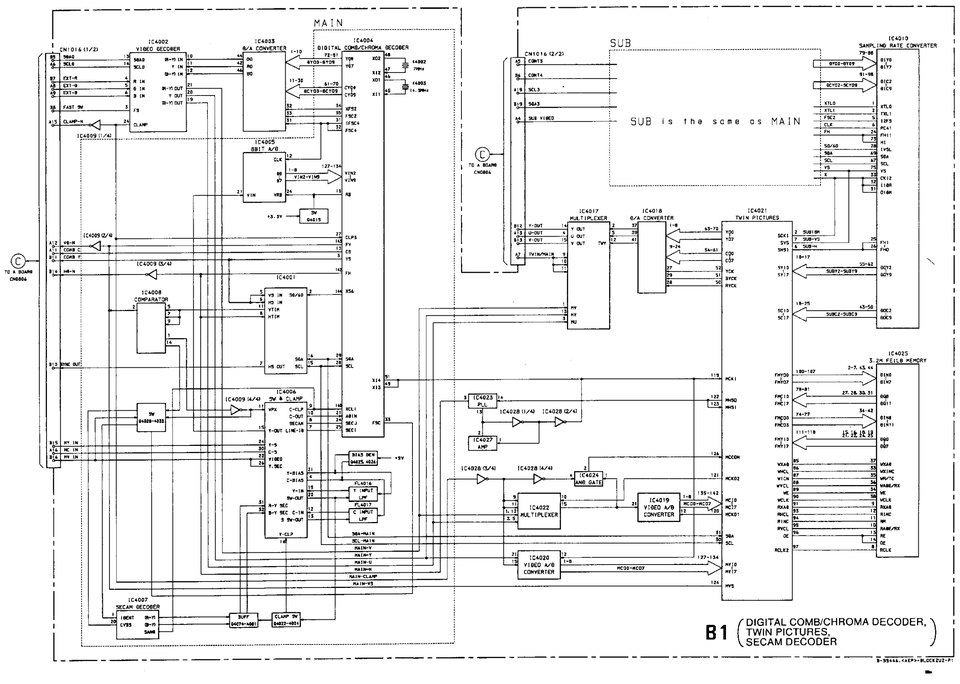
MEMO

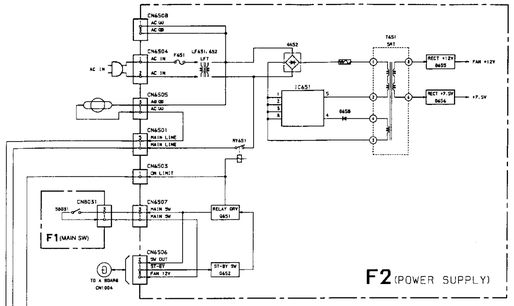
SECTION 4
DIAGRAMS

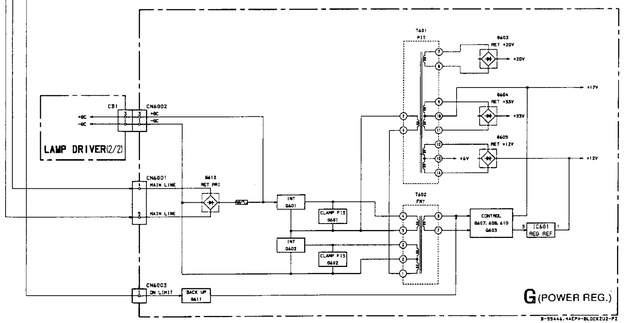
4-1. BLOCK DIAGRAMS

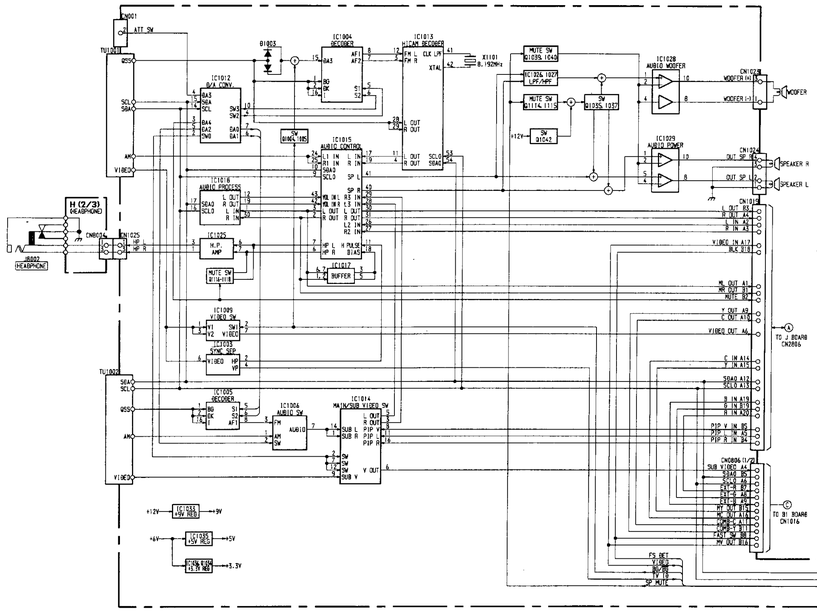


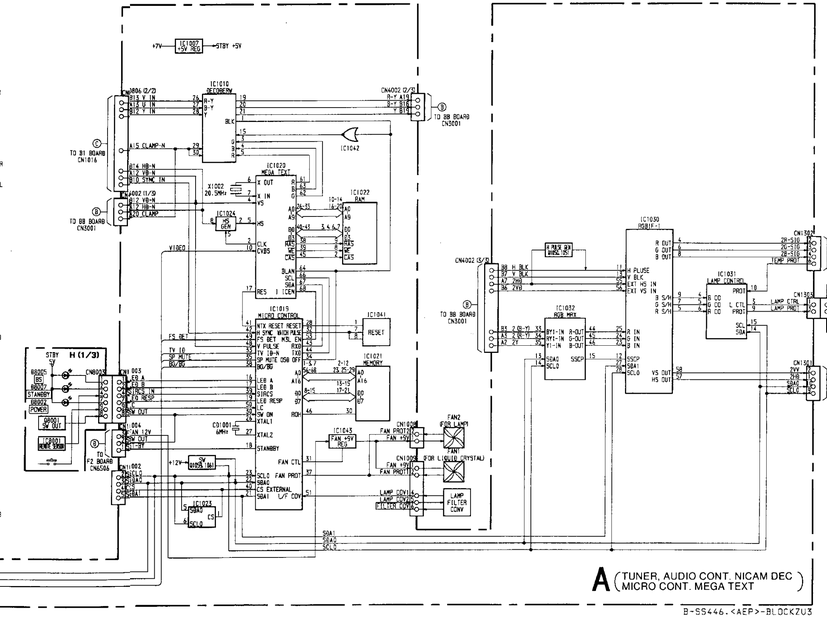




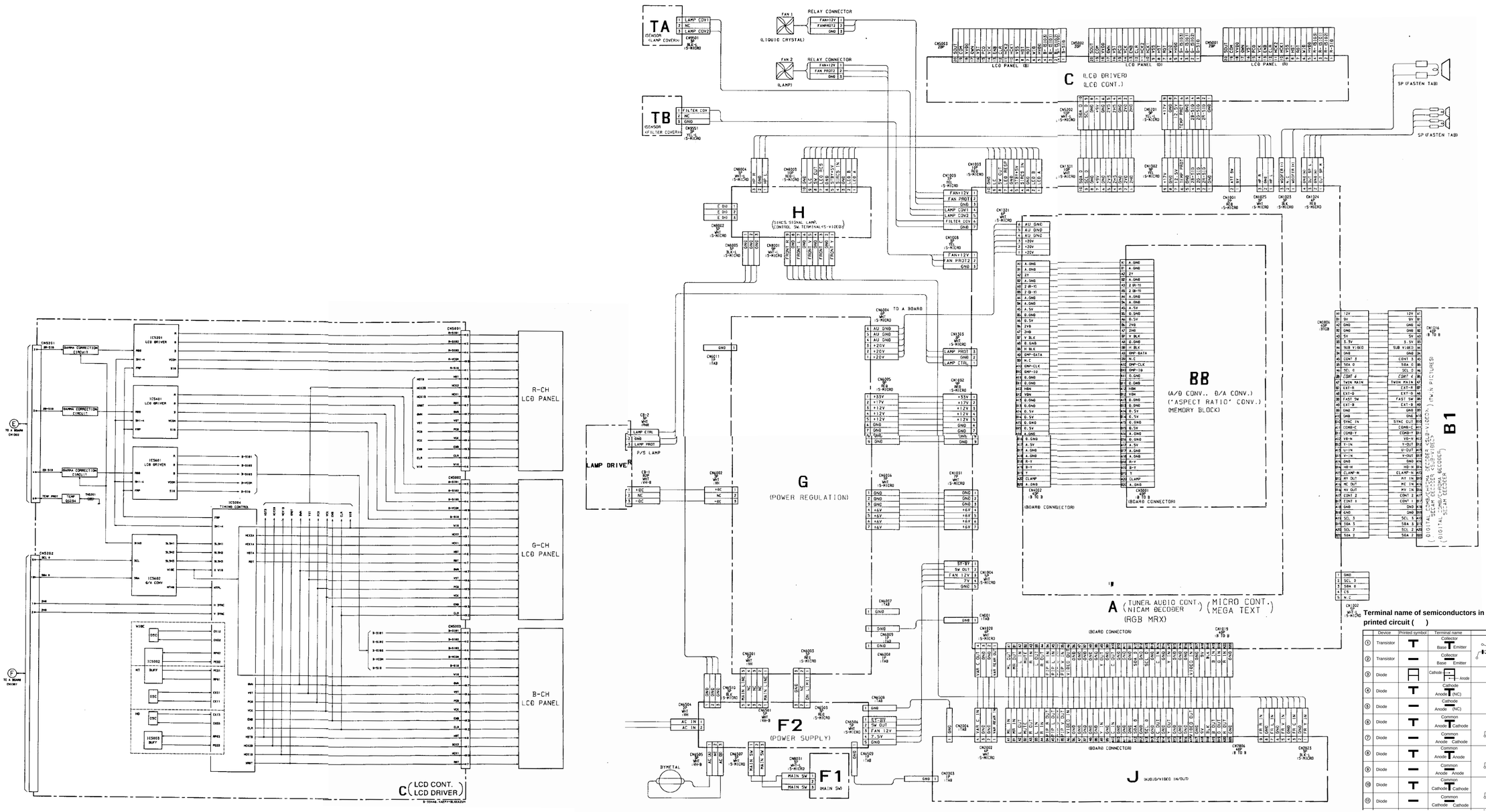

F2 (POWER SUPPLY)
F1 (MAIN SW)


LAMP DRIVER(2/2)
G (POWER REG.)

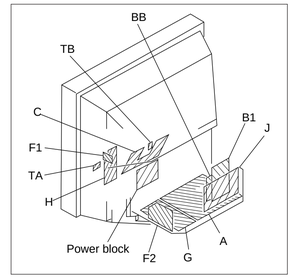

H (2/3)
(HEADPHONE)


A (TUNER, AUDIO CONT, NICAM DEC
MICRO CONT. MEGA TEXT)
B-SS446.<AEP>-BLOCKZU3

4-2. FRAME SCHEMATIC DIAGRAM



4-3. CIRCUIT BOARDS LOCATION



4-4. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note:

- All capacitors are in μF unless otherwise noted. (pF: μμF) Capacitors without voltage indication are all 50 V.
- Indication of resistance, which does not have one for rating electrical power, is as follows.

  Pitch: 5 mm
  Rating electrical power 1/4 W (CHIP : 1/10 W)

- All resistors are in ohms.
- : nonflammable resistor.
- : fusible resistor.
- : internal component.
- : panel designation, and adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- : earth-ground.
- : earth-chassis.
- All voltages are in V.
- Readings are taken with a 10 MΩ digital multimeter.
- Readings are taken with a color-bar signal input.
- Voltage variations may be noted due to normal production tolerances.

  * : Can not be measured.

  NO MARK: PAL

  ( ) : SECAM
- Circled numbers are waveform references.
- : B + bus.
- : B – bus.
- : Signal path.

Reference information

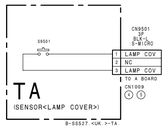
RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RW	NONFLAMMABLE WIREWOUND
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

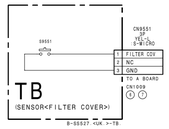
Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

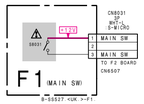
Terminal name of semiconductors in silk screen printed circuit ( )

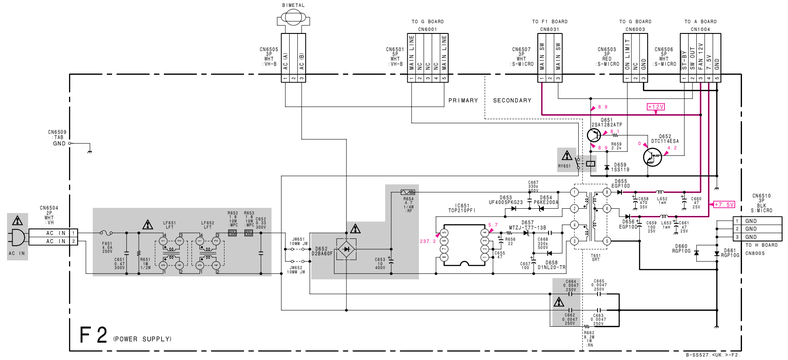
	Device	Printed symbol	Terminal name	Circuit
①	Transistor		Collector Base Emitter	
②	Transistor		Collector Base Emitter	
③	Diode		Cathode Anode	
④	Diode		Cathode Anode (NC)	
⑤	Diode		Cathode Anode (NC)	
⑥	Diode		Common Anode Cathode	
⑦	Diode		Common Anode Cathode	
⑧	Diode		Common Anode Anode	
⑨	Diode		Common Anode Anode	
⑩	Diode		Common Cathode Cathode	
⑪	Diode		Common Cathode Cathode	
⑫	Diode		Anode Cathode Anode Anode Cathode Anode	
⑬	Transistor (FET)		Drain Source Gate	
⑭	Transistor (FET)		Drain Source Gate	
⑮	Transistor (FET)		① Source ② Drain ③ Gate	
⑯	Transistor		① Emitter ② Collector ③ Base	
⑰	Transistor		CG2SJ43 RB1SJ43	
⑱	Transistor		CG2SJ43 EB1SFC2	
⑲	Transistor		CG 82 82 EB 1SJ43	
⑳	Transistor		CG 82 82 EB1SJ43	
㉑	Transistor		EG 82 81 CF CG2SJ43	
㉒	Transistor		EG 82 82 EB 1SJ43	
㉓	Transistor		EG 82 82 EB 1SJ43	
–	Discrete semiconductor			

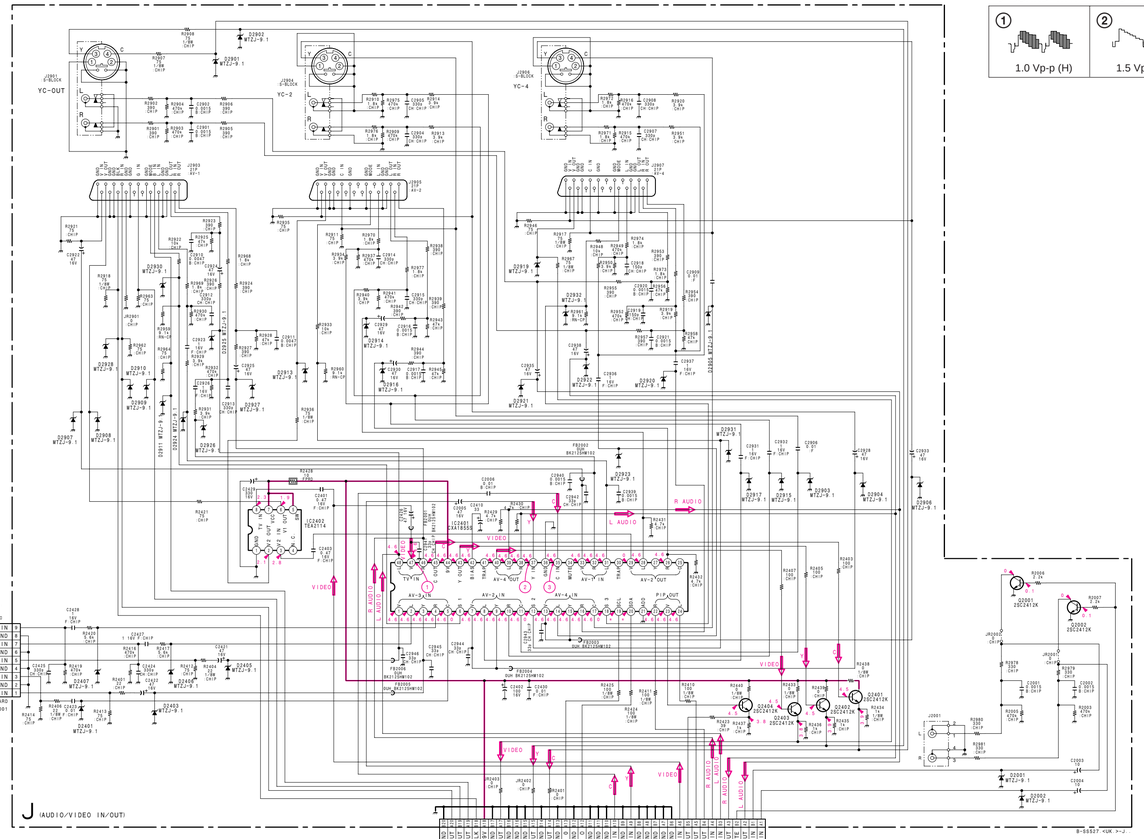
(Chip semiconductors that are not actually used are included.)





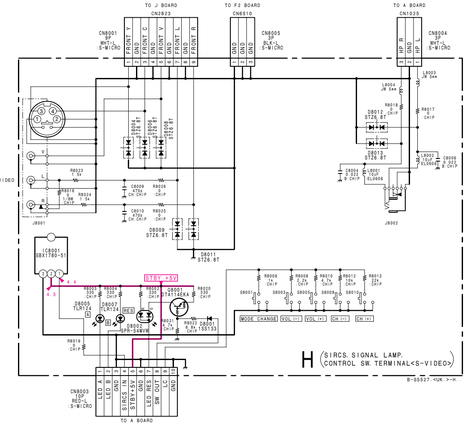


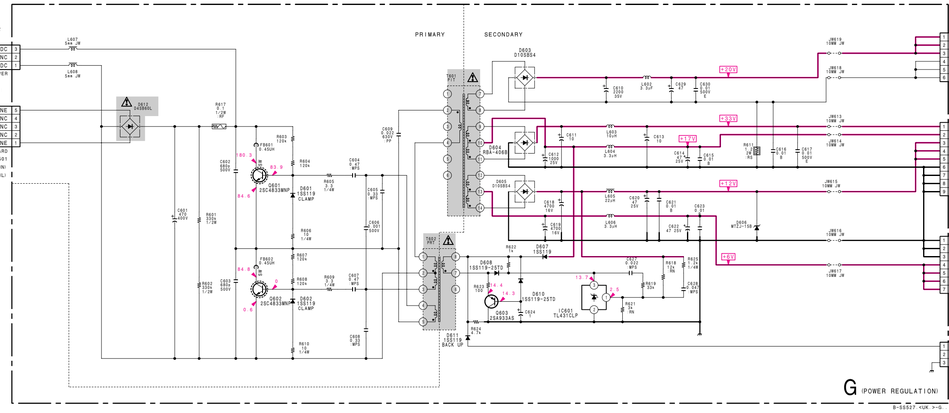




• J BOARD WAVEFORMS

①	②	③
1.0 Vp-p (H)	1.5 Vp-p (H)	1.0 Vp-p (H)

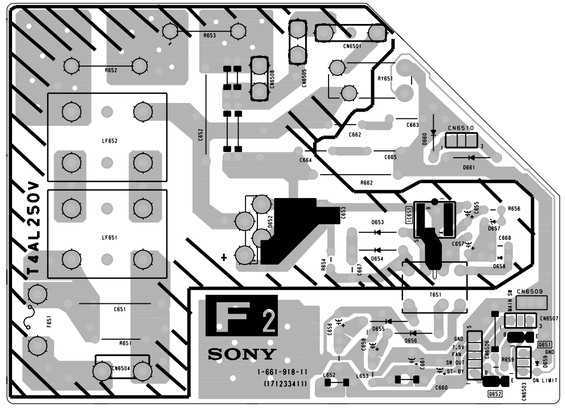




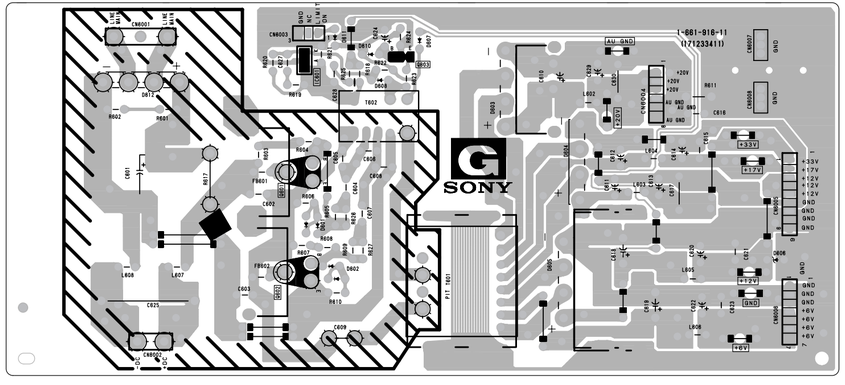
Schematic diagram

F1 F2 G H J TA TB board ➡

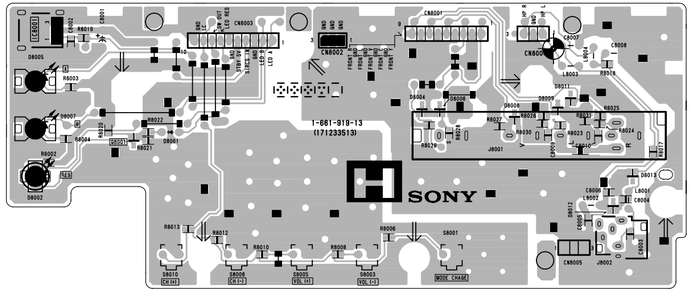
– F2 Board –



– G2 Board –



– H Board –

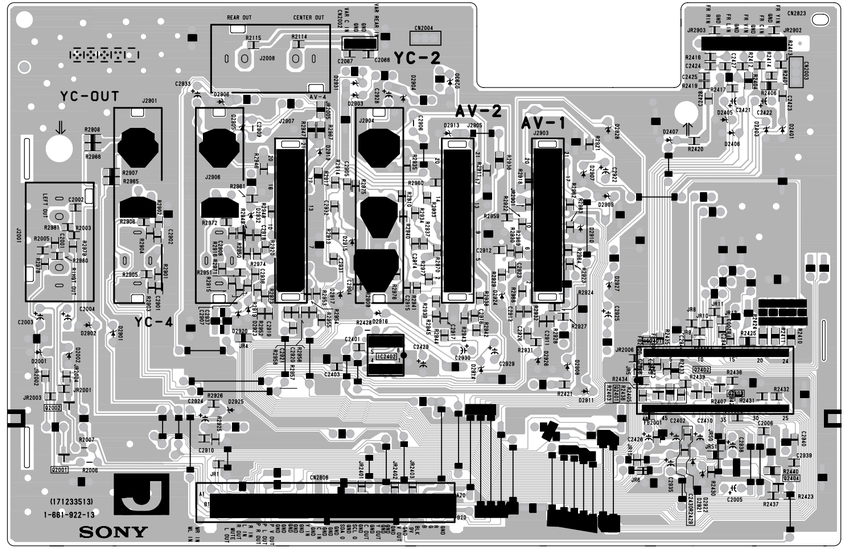


H BOARD
Terminal name of semiconductors in silk screen printed circuit (✻)

Ref.	✻
Q8001	①
D8004, D8006, D8008, D8009, D8011 – D8013	⑧

✻: Refer to Treminal name of semiconductors in silk screen printed circuit (see page 44)

– J Board –

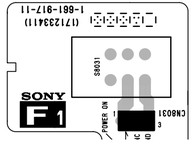


J BOARD
Terminal name of semiconductors in silk screen printed circuit (✻)

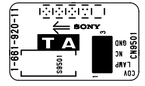
Ref.	✻
Q2001, Q2002, Q2401 – Q2404	①

✻: Refer to Treminal name of semiconductors in silk screen printed circuit (see page 44)

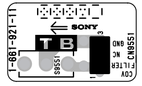
– F1 Board –



– TA Board –

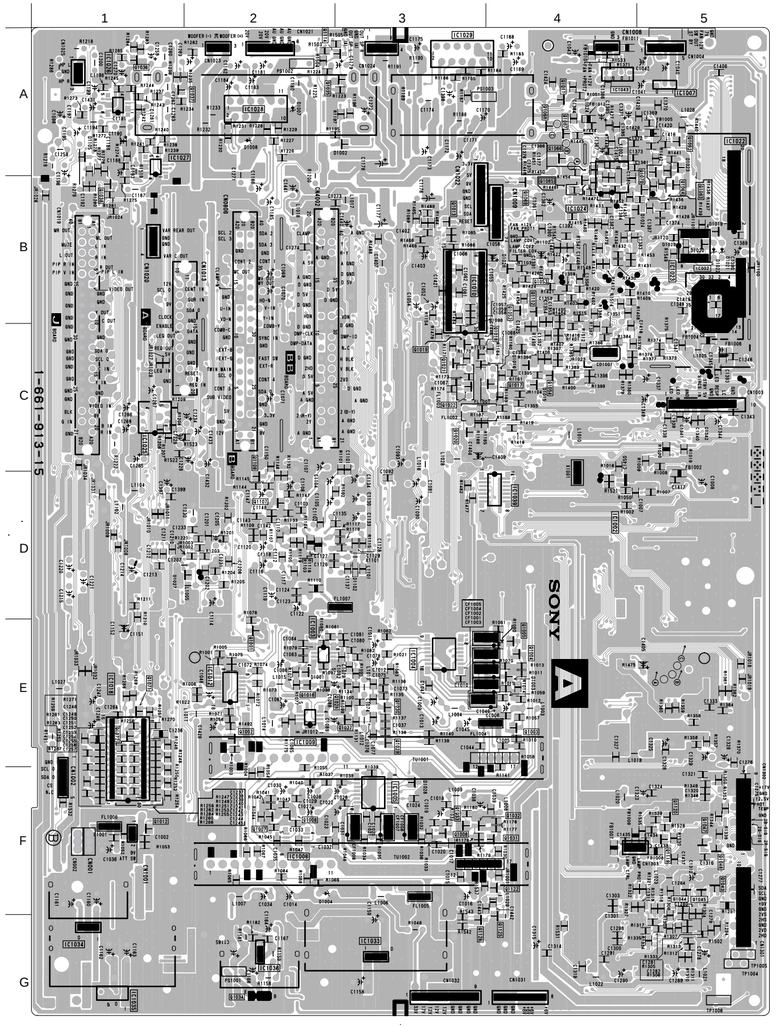


– TB Board –



A [TUNER, AUDIO CONT., NICAM DECODER, RGB MRX, MICRO CONT., MEGA TEXT]

– A Board (Conductor Side) –



• A BOARD SEMICONDUCTOR LOCATION

IC

	(Conductor Side)	(Component Side)
IC1001		D-1
IC1003	E-2	
IC1004	E-3	E-3
IC1005	F-3	
IC1006	F-2	F-4
IC1007	A-5	A-1
IC1009	E-2	
IC1010	B-3	B-3
IC1012	E-2	
IC1013		D-4
IC1014		D-3
IC1015		D-4
IC1017		E-5
IC1018	E-1	E-5
IC1019		B-1
IC1020		A-1
IC1021		B-1
IC1022	A-5	B-1
IC1023	B-5	B-1
IC1024	B-4	B-2
IC1025	C-1	C-5
IC1026	A-1	
IC1027	A-1	
IC1028	A-2	A-4
IC1029	A-3	A-3
IC1030		F-1
IC1031		G-1
IC1032		E-1
IC1033	G-3	G-3
IC1035	G-1	G-5
IC1036	G-2	G-4
IC1041		C-2
IC1042		A-2
IC1043	A-4	A-2

TRANSISTOR

	(Conductor Side)	(Component Side)	✻
Q1001	E-2		①
Q1003	E-4		①
Q1004	E-4		①
Q1005	E-4		①
Q1007	F-2		①
Q1008	F-2		①
Q1011	A-4		①
Q1012	F-1		①
Q1013	B-3		①
Q1014		B-3	②
Q1015		B-3	②
Q1016	E-2		①
Q1017	C-4		①
Q1018	C-4		①
Q1019	C-3		①
Q1020	C-3		①
Q1021	C-3		①
Q1022	C-3		①
Q1024		C-3	②
Q1025		C-3	②
Q1026		B-3	②
Q1027	E-3		①
Q1028	E-3		①
Q1029	E-3		①
Q1030	E-3		①
Q1031	F-4		①
Q1032	F-4		①
Q1033	F-3		①
Q1034	G-2	G-4	–
Q1035	A-3		①
Q1036	A-1		①
Q1037	A-2		①
Q1038	B-1		①
Q1039		A-3	②
Q1040		A-3	②
Q1042		A-5	②
Q1043	F-5		①
Q1044	F-5		①
Q1045	F-5		①
Q1047	F-5		①
Q1048	F-5		①
Q1049		F-1	②
Q1050		F-1	⑩
Q1051		E-1	⑩
Q1052	B-4		①
Q1053	B-4		①
Q1059		C-1	②
Q1060		C-1	②
Q1061		C-1	②
Q1062	A-5		①
Q1064	B-5		①
Q1065	B-4		①
Q1066	A-4		①
Q1067	A-4		①
Q1068	A-4		①
Q1069	B-4		①
Q1070	B-5		①
Q1071	E-1		①
Q1072	E-1		①
Q1076		B-3	②
Q1077		B-3	②
Q1078		B-3	②
Q1079		B-3	②
Q1105		D-5	②
Q1106		D-5	②
Q1107	D-2		①
Q1108	C-2		①
Q1109		E-5	②
Q1110		E-5	②
Q1112	B-4		①
Q1114	A-3		①
Q1115		A-3	②
Q1116		A-5	②
Q1117		C-4	②
Q1118		C-4	②
Q1119	F-5		①
Q1120	F-5		①
Q1121		F-2	②
Q1122	F-4		①
Q1123		F-2	②
Q1124		F-2	②
Q1125	F-4		①
Q1126	F-3		①
Q1127		B-2	②
Q1128		B-2	②

DIODE

	(Conductor Side)	(Component Side)	✻
D1001	E-2		⑧
D1002	A-3		⑧
D1003	E-4		⑩
D1004	F-2	F-3	–
D1007	A-2	A-4	–
D1008	A-2	A-4	–
D1009		A-5	⑨
D1010		A-5	⑨
D1011		A-5	⑨
D1012		F-1	⑨
D1013		F-1	⑨
D1014		C-2	⑨
D1015	C-4		⑧
D1018		C-1	⑨
D1019	B-5		⑧
D1020	B-5		⑩
D1021	B-5	B-1	–
D1022	B-5	B-1	–
D1024	B-5		④
D1026	B-4		⑥
D1027	D-2		⑨
D1028	F-3		⑨
D1029	B-5		③
D1101		D-3	⑨
D1102	D-3		③
D1103		A-5	⑨
D1104		A-5	⑨
D1105	A-1		⑧
D1106		A-5	⑨

TUNER

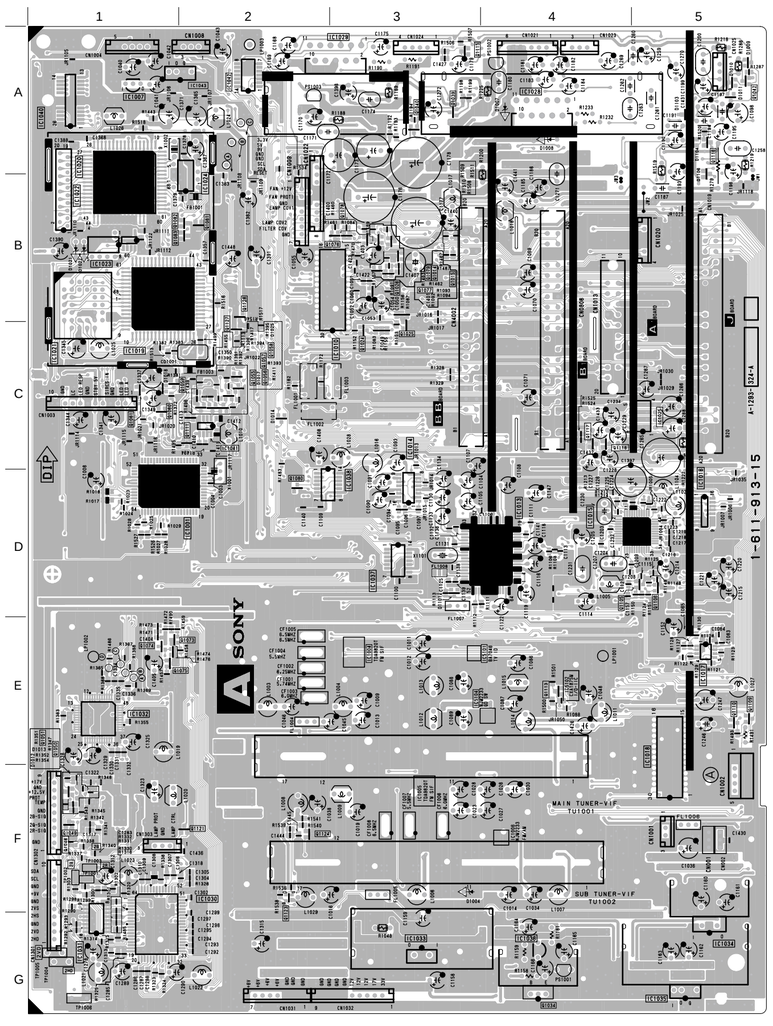
	(Conductor Side)	(Component Side)
TU1001	E-3	E-3
TU1002	F-3	F-3

CRYSTAL

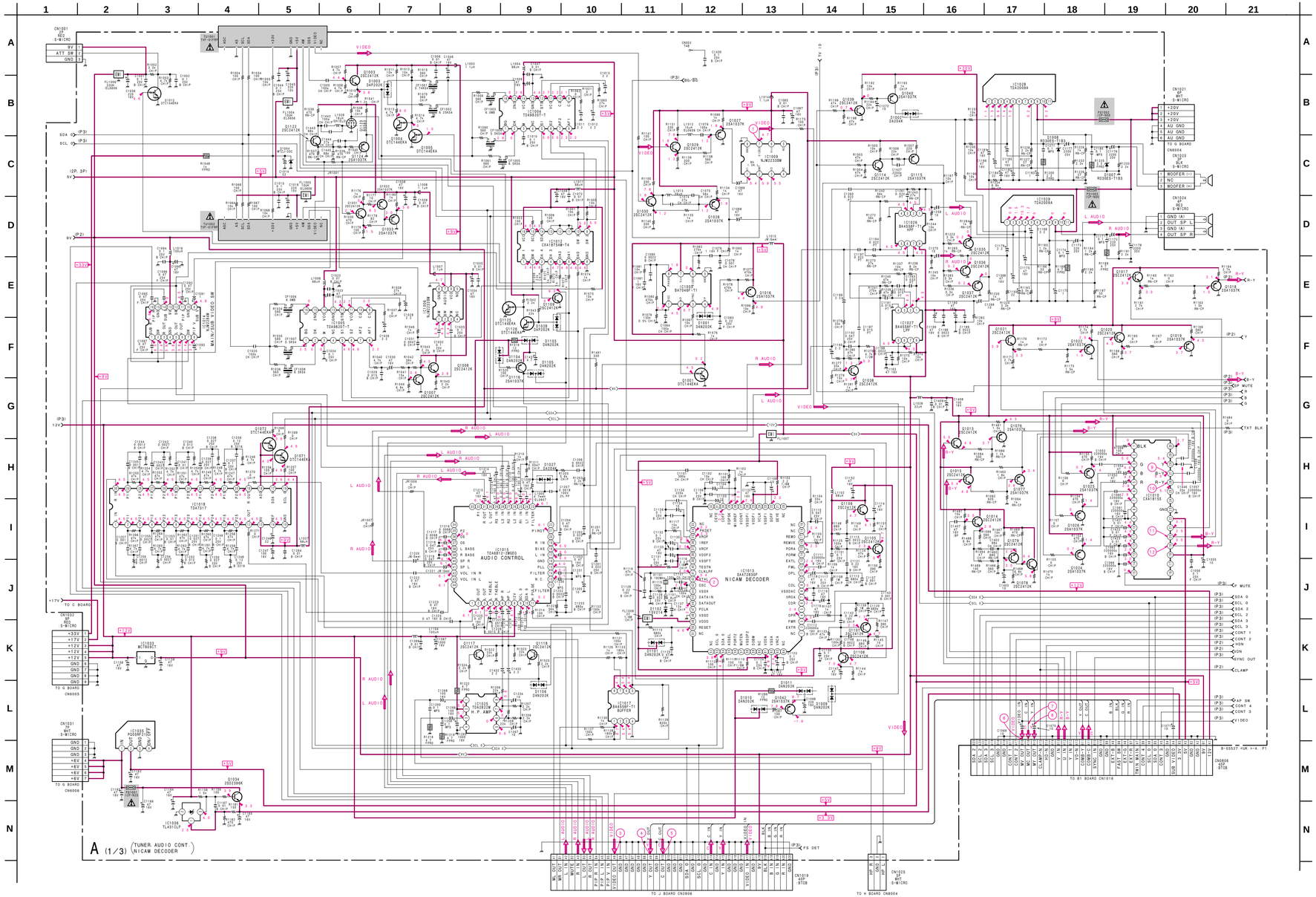
	(Conductor Side)	(Component Side)
X1001	C-4	C-2
X1002	A-4	A-1
X1101	D-3	D-3

✻: Refer to Terminal name of semiconductors in silk screen printed circuit
(see page 44)

– A Board (Component Side) –



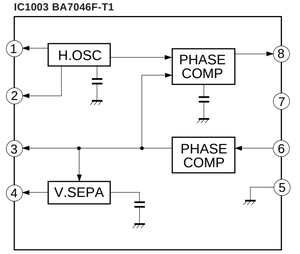
4-2. FRAME SCHEMATIC DIAGRAM



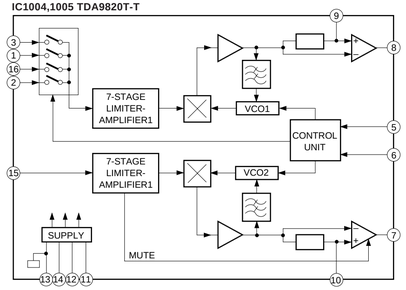
• A (1/3) BOARD WAVEFORMS

① 1.0 Vp-p (H)	② 0.8 Vp-p (8.192 MHz)	③ 0.8 Vp-p (H)	④ 1.2 Vp-p (H)
⑤ 0.8 Vp-p (H)	⑥ 1.5 Vp-p (H)	⑦ 0.8 Vp-p (H)	⑧ 1.1 Vp-p (H)
⑨ 0.8 Vp-p (H)	⑩ 0.8 Vp-p (H)	⑪ 2.2 Vp-p (H)	⑫ 2.2 Vp-p (H)

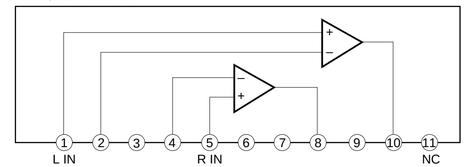
• A (1/3) BOARD IC1003 BA7046F-T1



• A (1/3) BOARD IC1004,1005 TDA9820T-T



• A (1/3) BOARD IC1028,1029 TDA2009A



(3) Schematic Diagram of A (2/3) Board

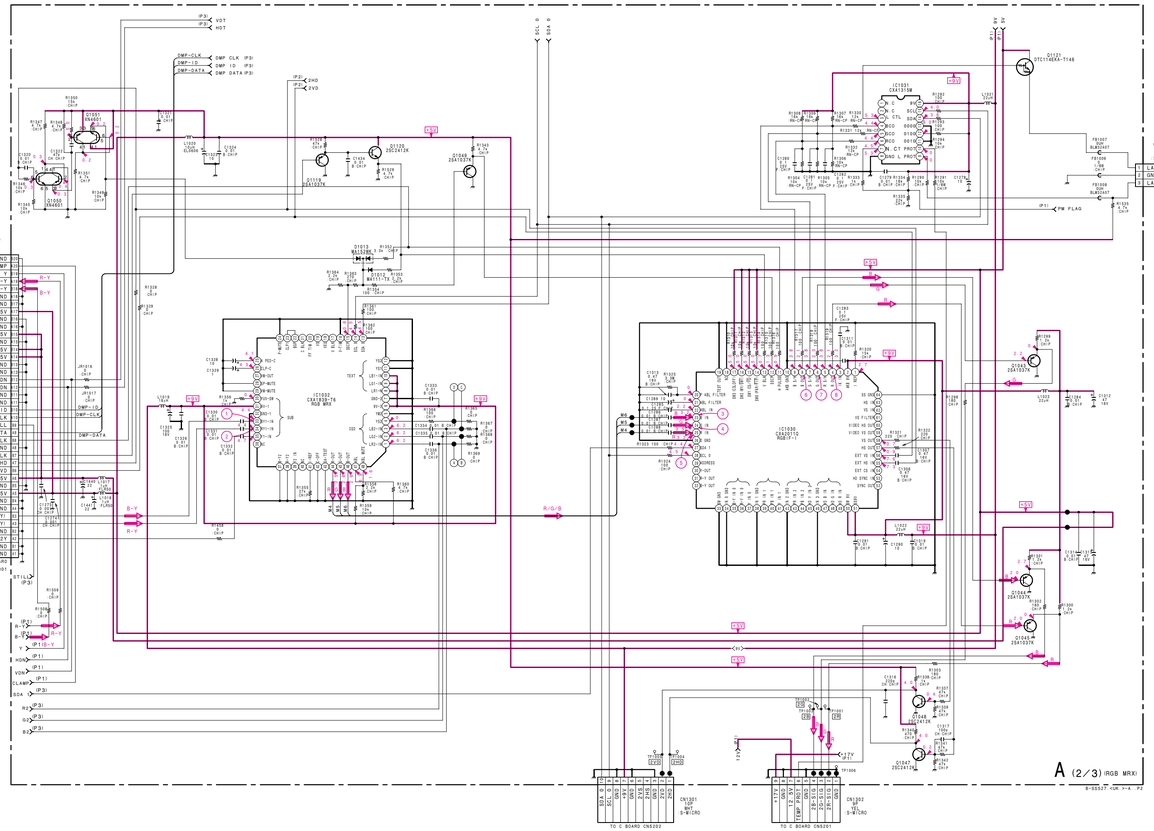
(3) Schematic Diagram of A (3/3) Board

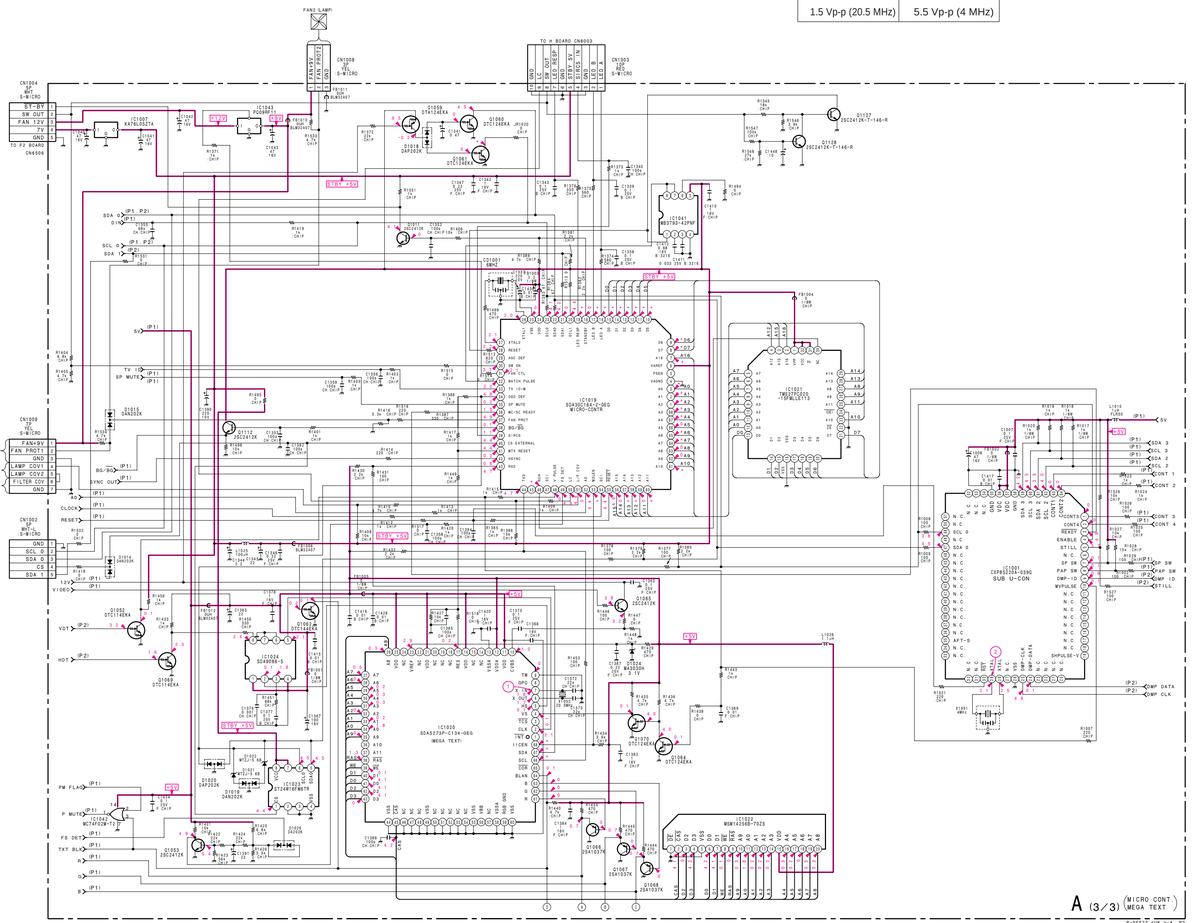
• A (2/3) BOARD WAVEFORMS

① 1.0 Vp-p (H)	② 1.0 Vp-p (H)	③ 1.2 Vp-p (H)	④ 0.9 Vp-p (H)
⑤ 0.9 Vp-p (H)	⑥ 3.0 Vp-p (H)	⑦ 2.5 Vp-p (H)	⑧ 2.5 Vp-p (H)

• A (3/3) BOARD WAVEFORMS

① 1.5 Vp-p (20.5 MHz)	② 5.5 Vp-p (4 MHz)





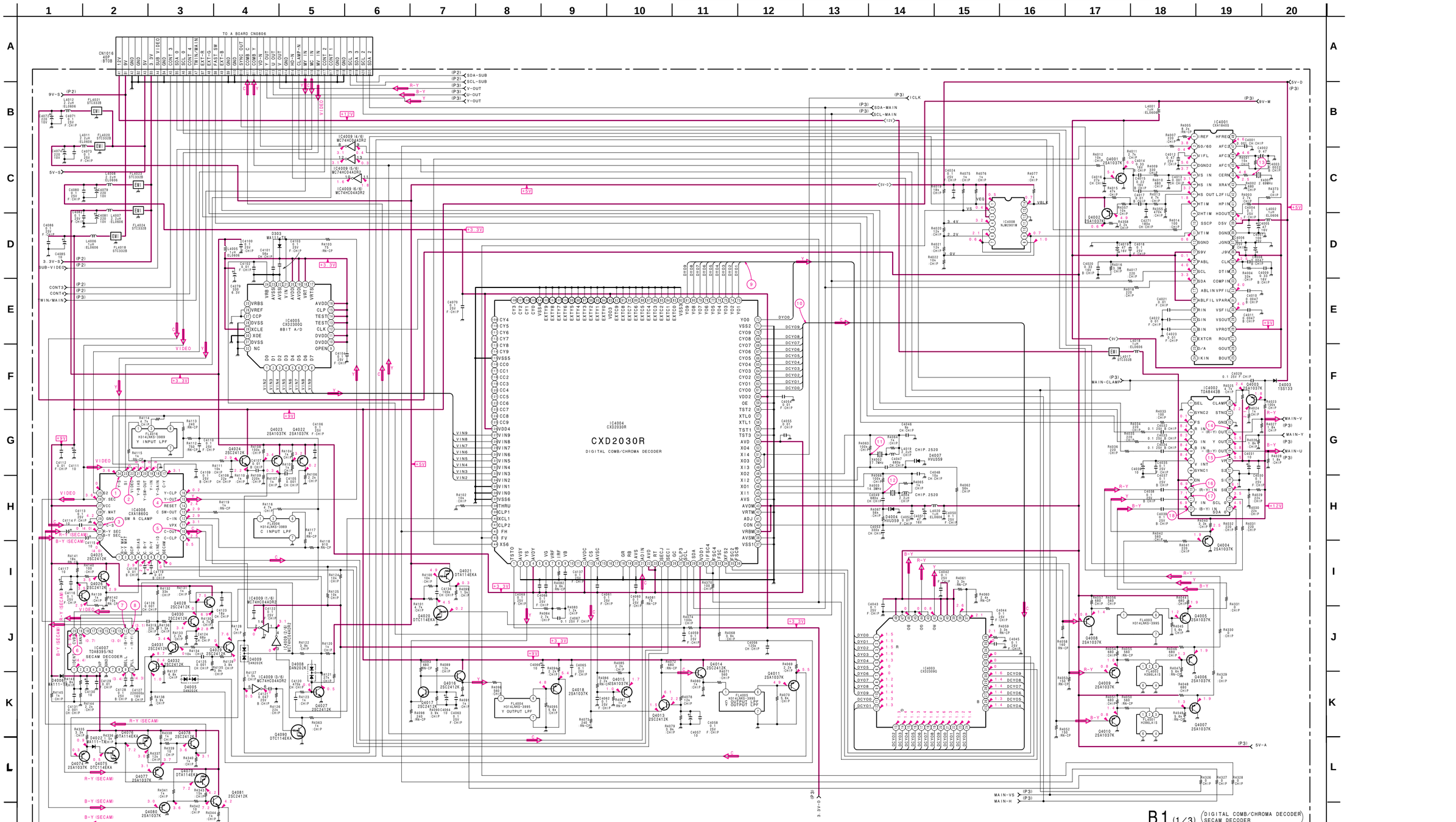
Schematic diagram
← A (1/3) board

Schematic diagram
A (1/3), A (3/3) board →

(5) Schematic Diagram of B1 (1/3) Board

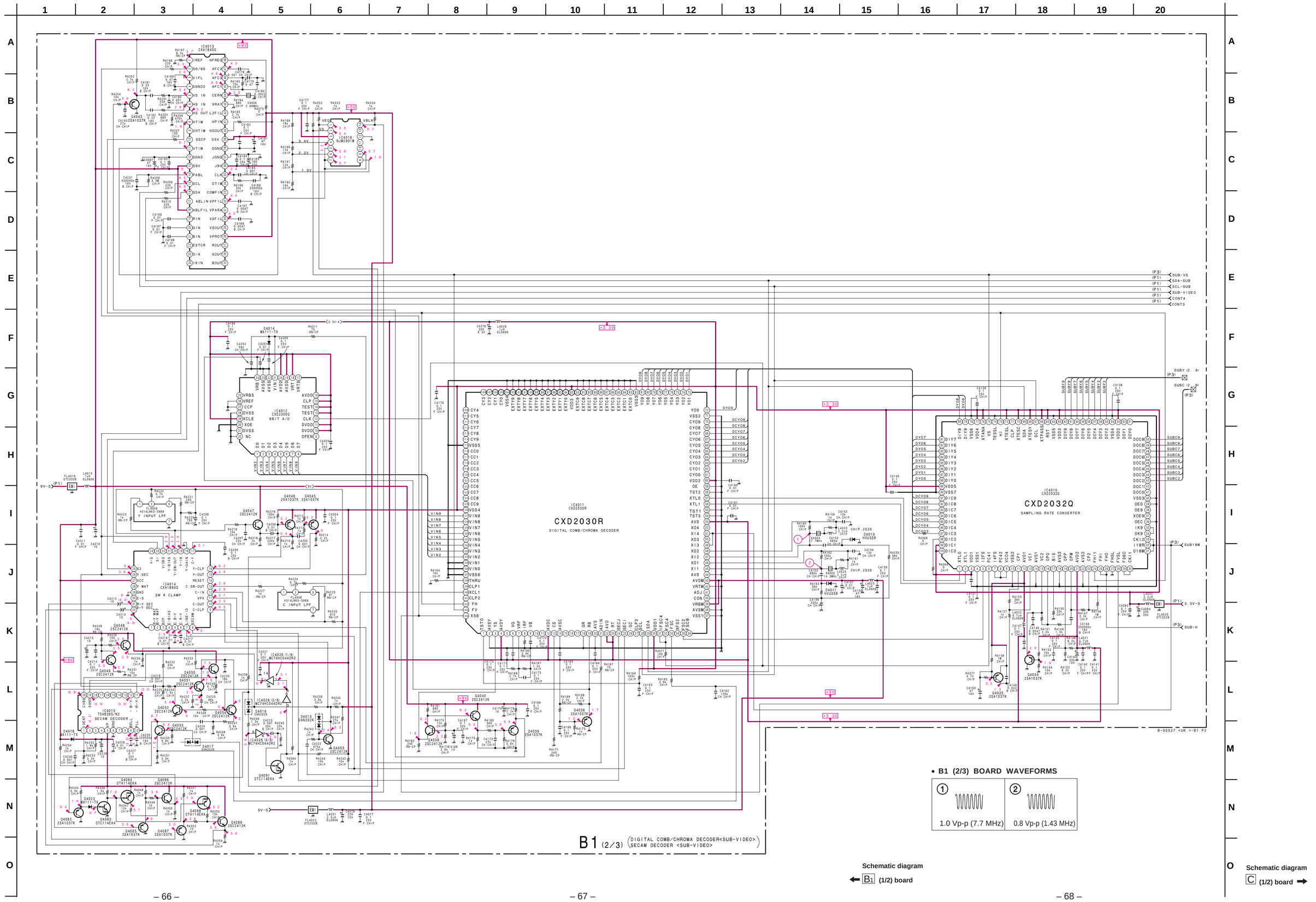
• B1 (1/3) BOARD WAVEFORMS

① 1.5 Vp-p (H)	② 2.0 Vp-p (H)	③ 1.0 Vp-p (H)	④ 1.2 Vp-p (H)	⑤ 0.8 Vp-p (H)	⑥ 1.5 Vp-p (H)
⑦ 1.5 Vp-p (H)	⑧ 1.3 Vp-p (H)	⑨ 3.5 Vp-p (H)	⑩ 3.5 Vp-p (H)	⑪ 1.0 Vp-p (7.7 MHz)	⑫ 0.8 Vp-p (14.3 MHz)
⑬ 2.0 Vp-p (2.69 MHz)	⑭ 1.5 Vp-p (H)	⑮ 1.7 Vp-p (H)	⑯ 0.7 Vp-p (H)	⑰ 0.9 Vp-p (H)	⑱ 0.9 Vp-p (H)



Schematic diagram
← B1 (1/2) board

Schematic diagram
B1 (2/3) board →


B1 (2/3) (DIGITAL COMB/CHROMA DECODER<SUB-VIDEO>)
(SECAM DECODER <SUB-VIDEO>)
IC4011 CXD2030R
CXD2030R
DIGITAL COMB/CHROMA DECODER
IC4010 CXD2032Q
CXD2032Q
SAMPLING RATE CONVERTER
IC4013 CXA1864S
IC4014 CXA1860Q
SW & CLAMP
IC4015 TDA8395/N2
SECAM DECODER
IC4016 NJW2901M
IC4012 CXD2300Q
8BIT A/D
D4014 MA111-TX
Q4043 2SA1037K
Q4045 2SA1037K
Q4046 2SA1037K
Q4047 2SC2412K
Q4048 2SC2412K
Q4049 2SC2412K
Q4050 2SC2412K
Q4051 2SC2412K
Q4052 2SC4738
Q4053 2SC4213K
Q4054 2SA1037K
Q4055 2SC2412K
Q4080 2SA1037K
Q4081 MA111-TX
Q4082 2SA1037K
Q4083 DTC114EKA
Q4084 DTA114EKA
Q4085 2SA1037K
Q4086 2SC2412K
Q4087 2SA1037K
Q4088 DTA114EKA
Q4089 2SC2412K
Q4091 DTC114EKA
Q4035 2SA1037K
Q4036 2SA1037K
Q4038 2SC2412K
Q4039 2SA1037K
Q4040 2SC2412K
D4015 DAN202K
D4016 DAN202K
D4017 DAN202K
IC4026 (1/6) MC74HC04ADR2
IC4026 (2/6) MC74HC04ADR2
IC4026 (3/6) MC74HC04ADR2
FLX809 H31KLNK0-3989 Y INPUT LPF
FLX808 H31KLNK0-3989 C INPUT LPF
FL4018 STC332B
FL4022 STC332B
L4013 1uH EL0606
L4014 10uH EL0606
L4031 2.2mH EL0606
L4032 2.2mH EL0606
L4033 2.2mH EL0606
L4034 2.2mH EL0606
L4035 2.2mH EL0606
L4036 2.2mH EL0606
L4037 2.2mH EL0606
L4038 2.2mH EL0606
L4039 2.2mH EL0606
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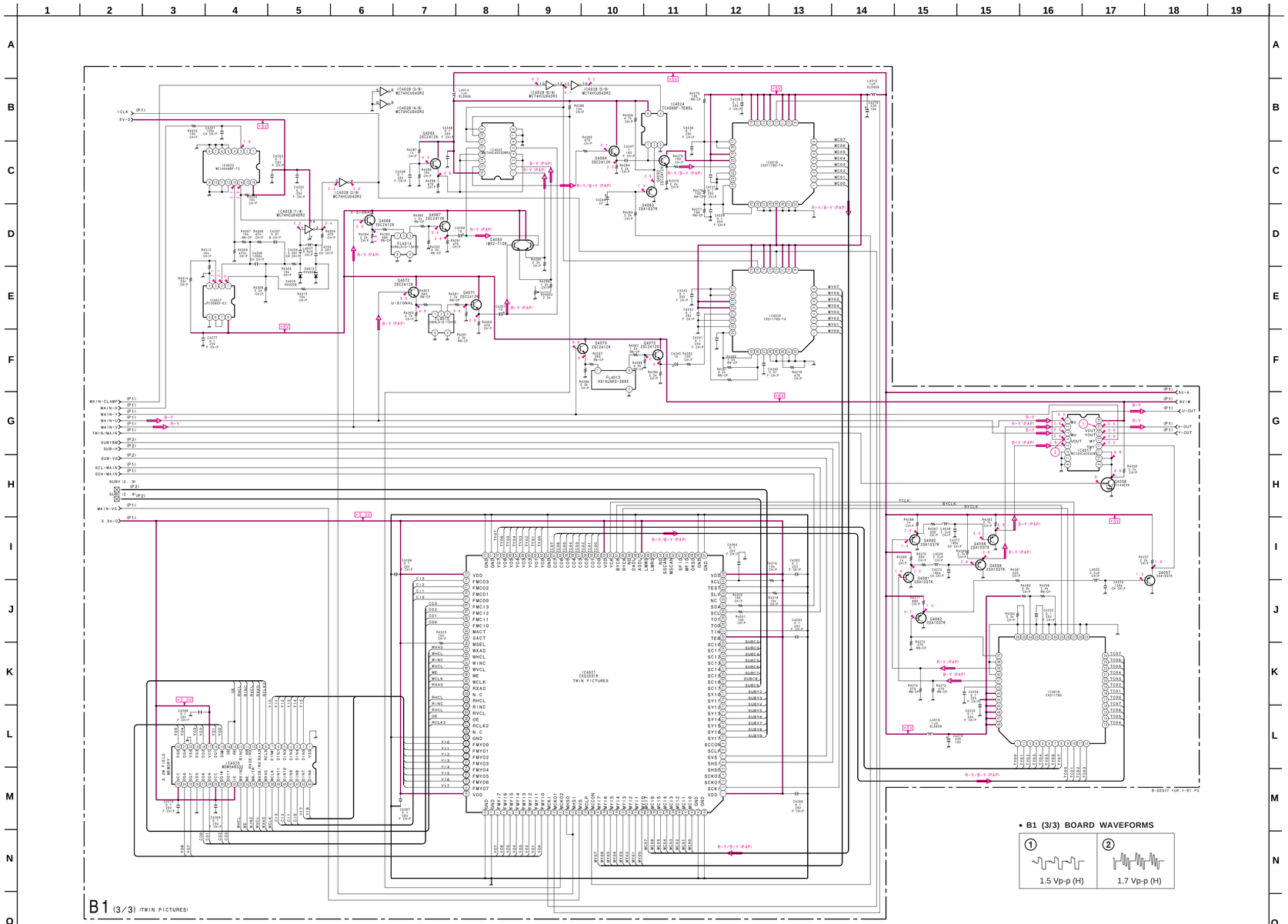
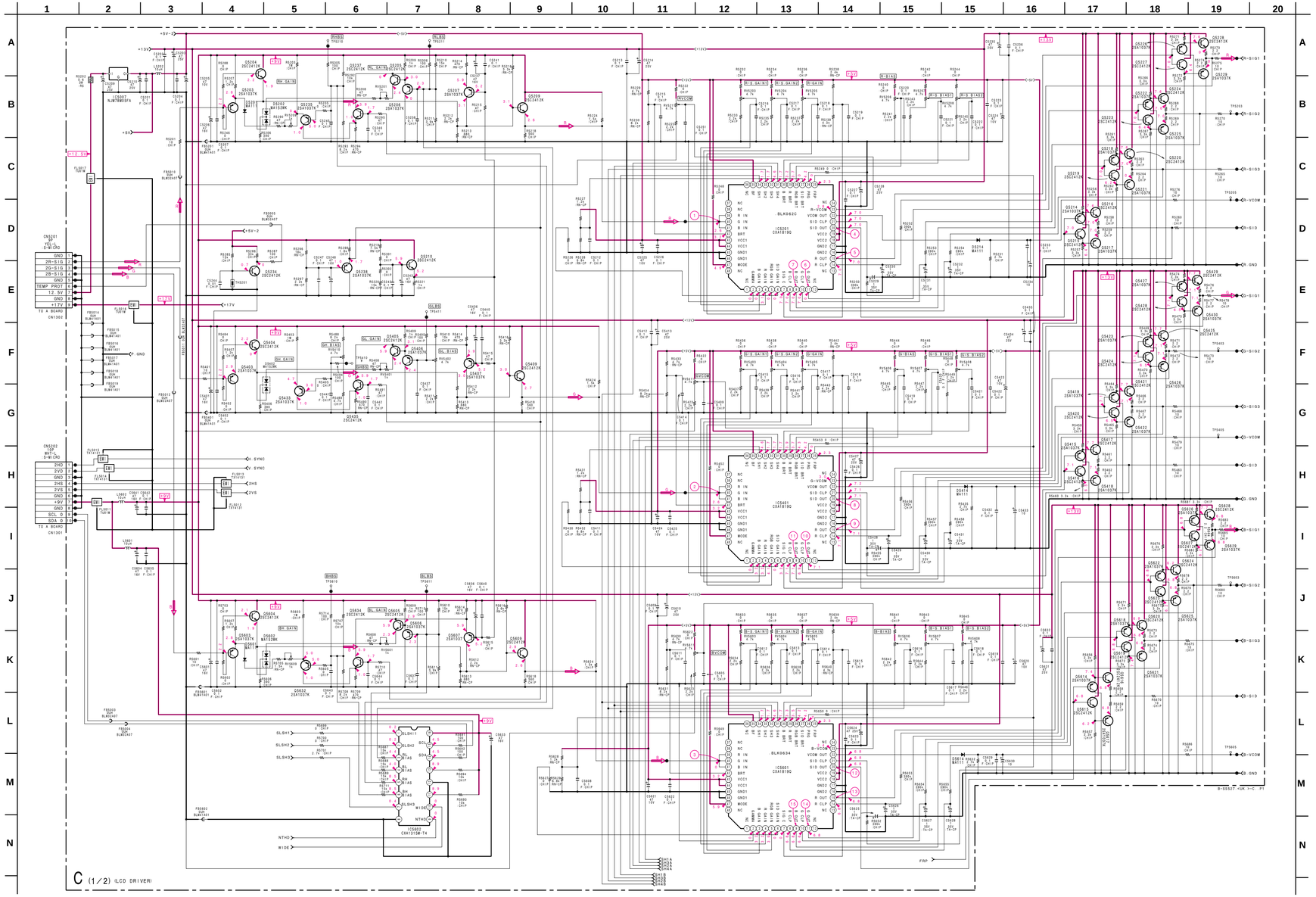
L4042 2.2mH EL0606
L4043 2.2mH EL0606


B1 (3/3) (TWIN PICTURES)
IC4021 CXD3031R TWIN PICTURES
IC4018 CXD1178Q
IC4019 CXD1178Q-T4
IC4020 CXD1178Q-T4
IC4020 (1/4) MC74HCU04DR2
IC4020 (2/4) MC74HCU04DR2
IC4020 (3/4) MC74HCU04DR2
IC4020 (4/4) MC74HCU04DR2
IC4020 (5/6) MC74HCU04DR2
IC4020 (6/6) MC74HCU04DR2
IC4003 MC14066BF-T2
IC4022 LMC1992M
IC4023 M38K09F8FP
IC4024 TC4066BF-TE85L
IC4025 M38K09F8FP
IC4026 LA7837
IC4027 LA7837
IC4028 LA7837
IC4029 LA7837
IC4030 LA7837
IC4031 LA7837
IC4032 LA7837
IC4033 LA7837
IC4034 LA7837
IC4035 LA7837
IC4036 LA7837
IC4037 LA7837
IC4038 LA7837
IC4039 LA7837
IC4040 LA7837
IC4041 LA7837
IC4042 LA7837
IC4043 LA7837
IC4044 LA7837
IC4045 LA7837

(8) Schematic Diagram of C (1/2) Board

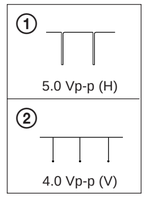


• C (1/2) BOARD WAVEFORMS

① 0.8 Vp-p (H)	② 0.8 Vp-p (H)
③ 0.8 Vp-p (H)	④ 10.0 Vp-p (H)
⑤ 10.0 Vp-p (H)	⑥ 10.0 Vp-p (H)
⑦ 10.0 Vp-p (H)	⑧ 10.0 Vp-p (H)
⑨ 10.0 Vp-p (H)	⑩ 10.0 Vp-p (H)
⑪ 10.0 Vp-p (H)	⑫ 10.0 Vp-p (H)
⑬ 1.0 Vp-p (H)	⑭ 1.0 Vp-p (H)
⑮ 10.0 Vp-p (H)	

(9) Schematic Diagram of C (2/2)Board

• C (2/2) BOARD WAVEFORMS

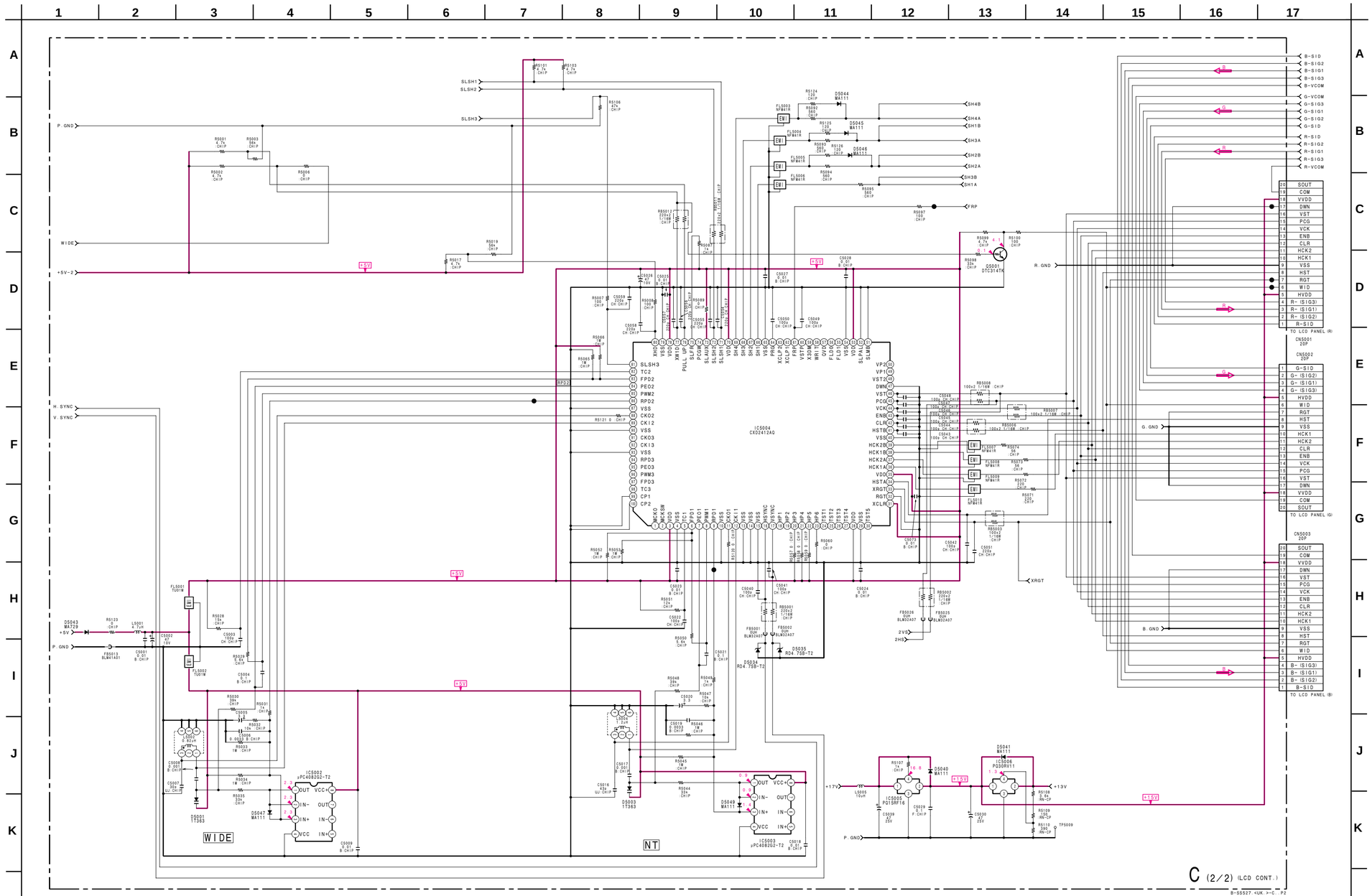


C BOARD

Terminal name of semiconductors in silk screen printed circuit (*)

Ref.	*
Q5404, Q5409, Q5417, Q5421, Q5425, Q5426, Q5429, Q5430, Q4533, Q5609, Q5616, Q5617, Q5620, Q5621, Q5624, Q5625, Q5628, Q5629	①
Q5001, Q5203 – Q5207, Q5209, Q5210, Q5214 – Q5229, Q5234, Q5235, Q5237, Q5238, Q5403, Q5405 – Q5407, Q5415, Q5416, Q5418 – Q5420, Q5422 – Q5424, Q5427, Q5428, Q5435, Q5603 – Q5607, Q5614, Q5615, Q5618, Q5619, Q5622, Q5623, Q5626, Q5627, Q5632, Q5634	②
D5001, D5003, D5034, D5035, D5040, D5041, D5043 – D5047, D5049, D5201, D5214, D5414, D5601, D5614	③
D5202, D5402, D5602	⑨

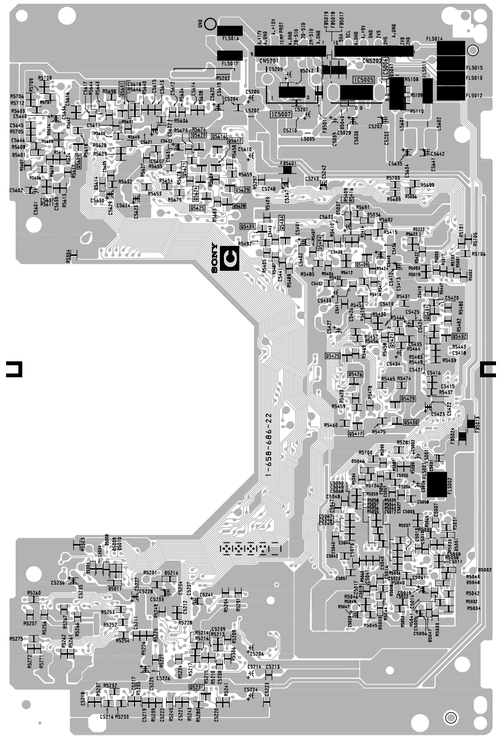
*: Refer to Treminal name of semiconductors in silk screen printed circuit (see page 44)



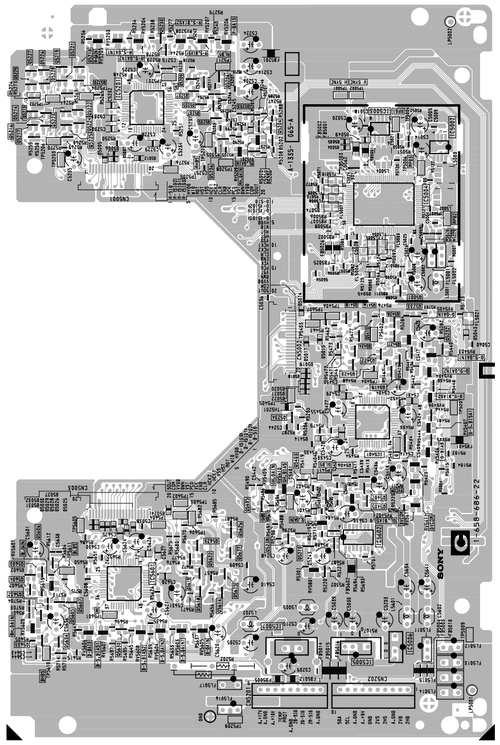
Schematic diagram
← C (2/2) board

– C Board (Conductor Side) –

C [LCD DRIVER, LCD CONT.]



– C Board (Conductor Side) –

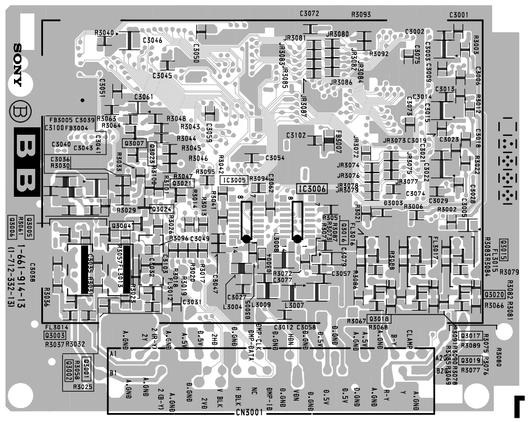


Schematic diagram
BB (2/2) board →

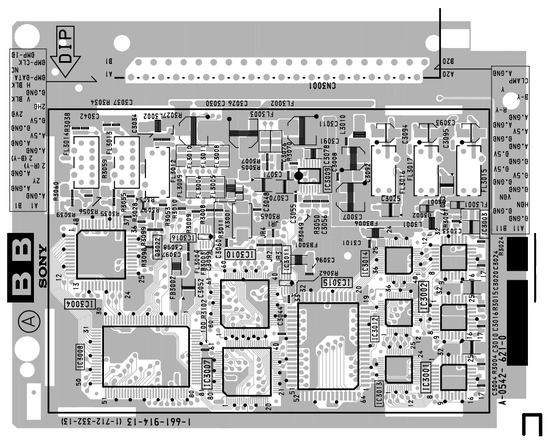
(10) Schematic Diagram of BB (1/3) Board

BB A/D CONV., D/A CONV. "ASPECT RATIO" CONV. MEMORY BLOCK

– BB Board (Conductor Side) –



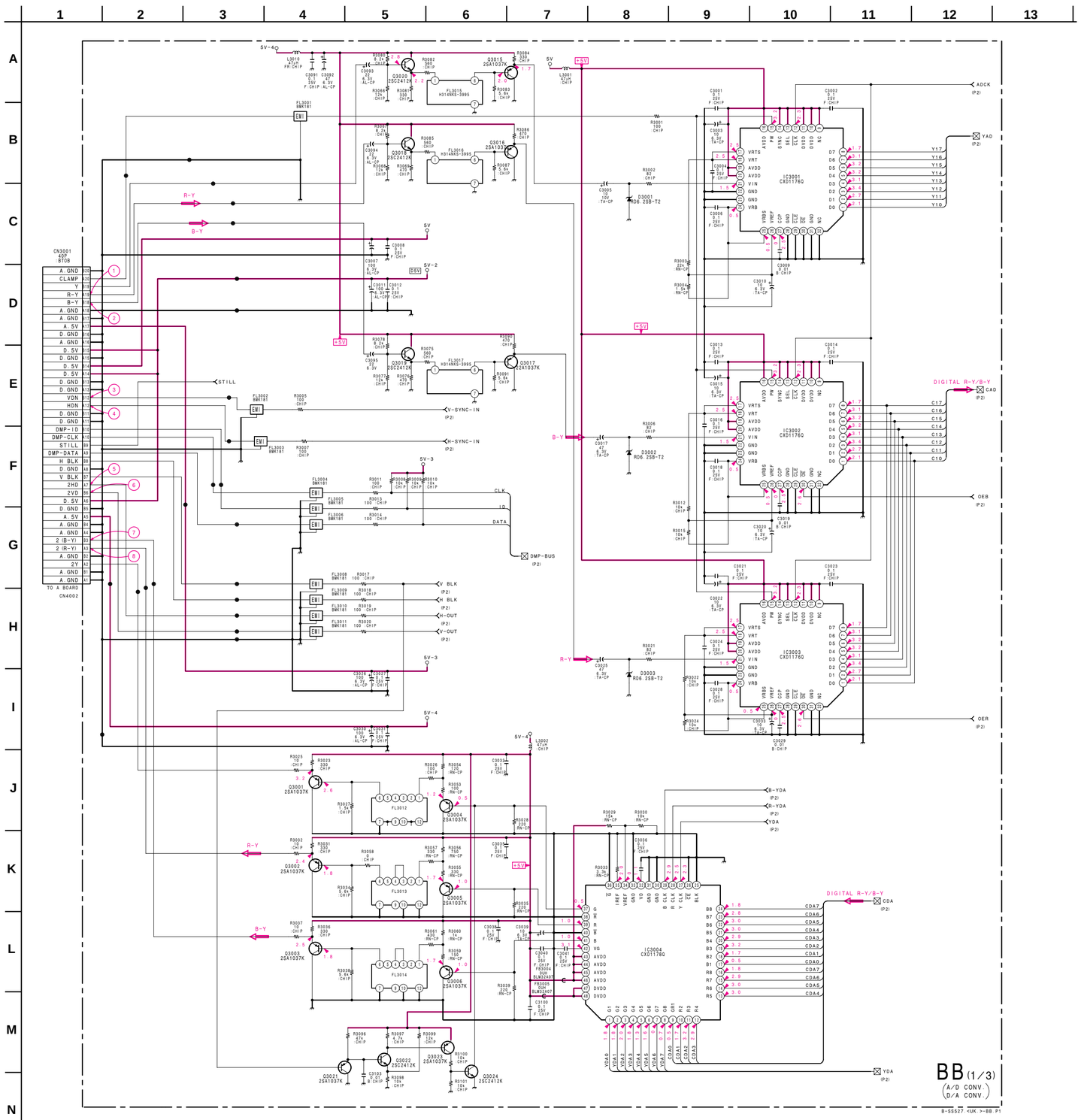
– BB Board (Component Side) –



BB BOARD
Terminal name of semiconductors in silk screen printed circuit (∗)

Ref.	∗
Q3001 – Q3007, Q3015 – Q3021, Q3023, Q3024	①
Q3022	②
D3001 – D3005	③

∗: Refer to Treminal name of semiconductors in silk screen printed circuit (see page 44)



• BB (1/3) BOARD WAVEFORMS

① 1.0 Vp-p (H)

② 1.2 Vp-p (H)

③ 3.0 Vp-p (H)

④ 3.2 Vp-p (H)

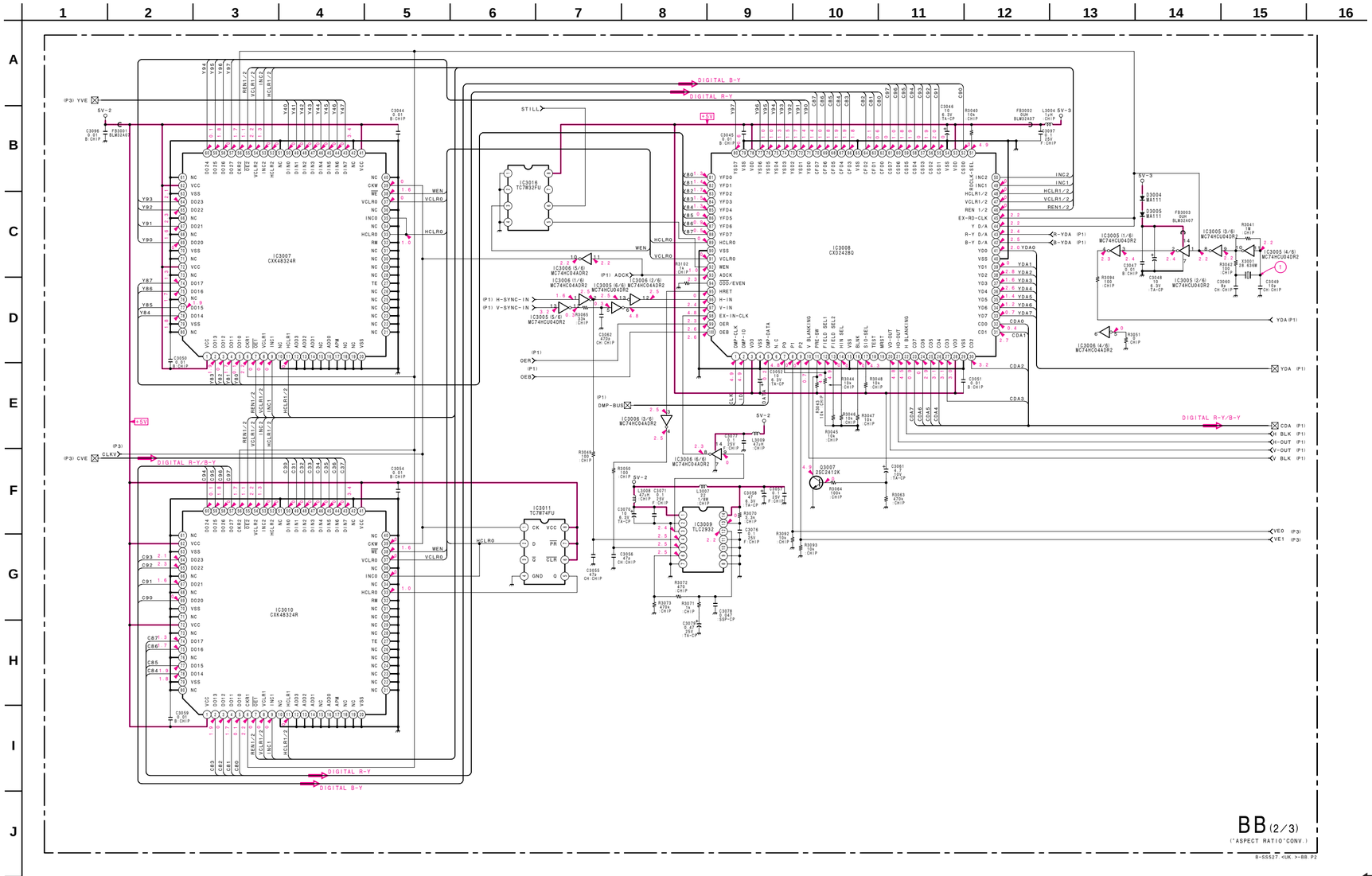
⑤ 4.3 Vp-p (H)

⑥ 4.5 Vp-p (H)

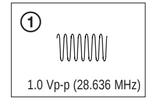
⑦ 1.0 Vp-p (H)

⑧ 1.0 Vp-p (H)

(11) Schematic Diagram of BB Board



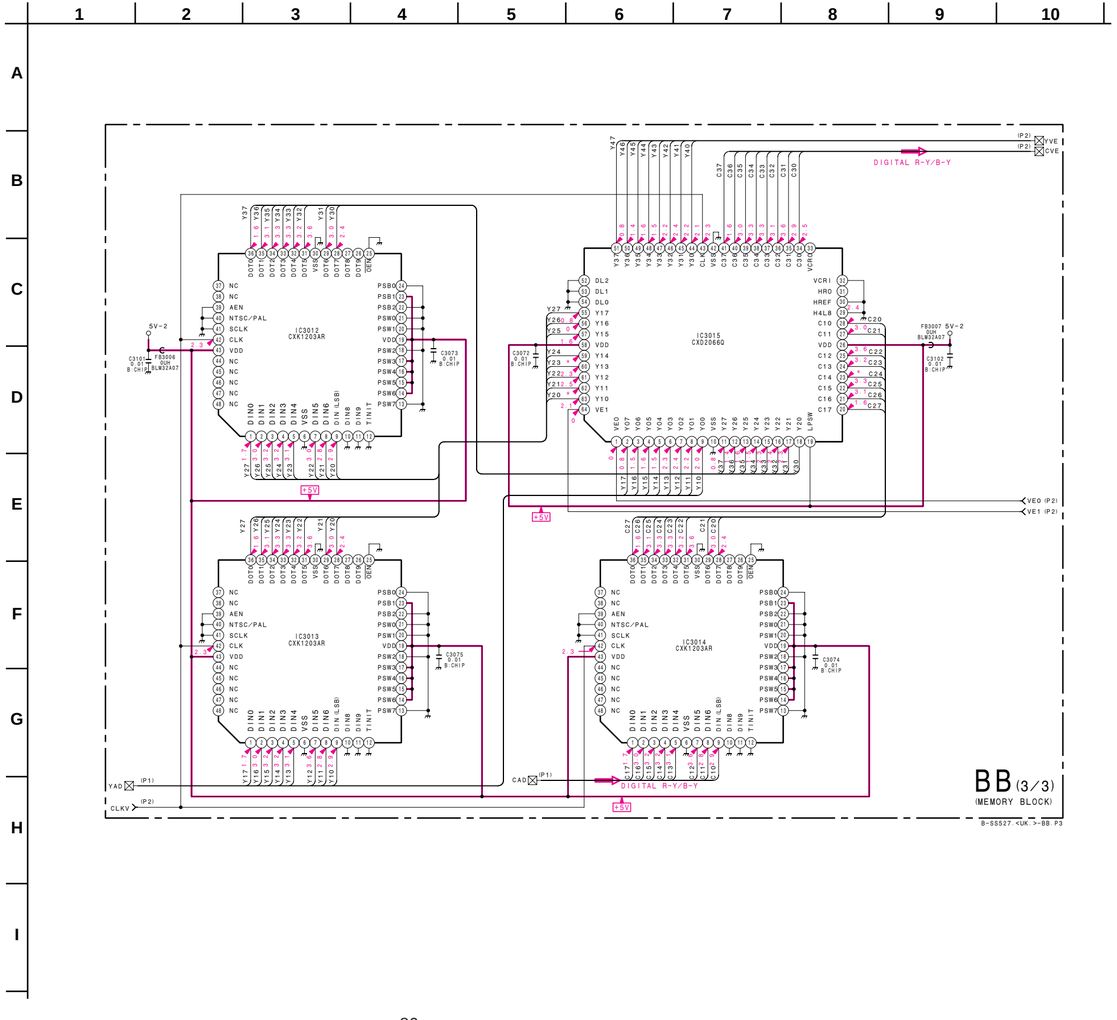
- **BB (2/3) BOARD WAVEFORMS**



Schematic diagram
← BB (1/2) board

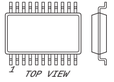
Schematic diagram
BB (2/2) board →

(12) Schematic Diagram of (3/3) Board



4-5. SEMICONDUCTOR

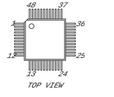
BA4558F
BA7046F
CXA1315M
CXA1875AM-T4
CXD1176Q
CXD1176Q-T4
CXK1203AR
LM2901M
MB3793-42PNF
MC14046BF
MC14046BF-T2
MC74F02M-T2
MC74HCU04DR2
MC74HC04ADR2
MC74HC4053DNR2
NJM2233BM
NJM2284M
NJM2901M-T2
TC7W32FU
TC7W74FU
TLC2932IPW
µPC358GR-E1
µPC4082G2



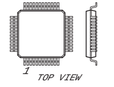
CXA1815S

NO ILLUST

CXA1819Q
CXD1178Q
CXD1178Q-T6
CXD2309Q-T6

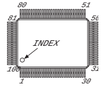


CXA1839Q-T6
CXA1860Q-T4
CXA2011Q
CXD2030R
CXD2031R-65846GJ015
CXD2031R-65846GJ0153EN
CXD2300Q-T4
CXK48324R
CXK48324R-1
TDA6812-2MGEG

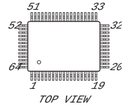


CXA1840S
CXA1855S
SDA9086-5
ST24C16FB6
ST24W16FM6TR
TDA7317
TDA8443B
TDA9820
TEA2114

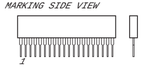
CXD2412AQ
CXD2032Q-TL
CXD2428Q



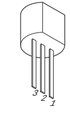
CXD2066Q
SAA7283GP



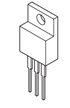
MB81C4256A-70PSZG



MC78L05ACPRP
NJM78L05A

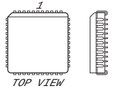


MC7809CT
NJM78M05FA
NJM78M09FA

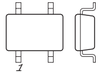


PQ05RF21
PQ09RA1
PQ09RF11
PQ15RF16
PQ30RV11

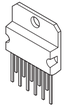
SDA30C164-GEG
SDA5273P-C134-GEG



TC4S66F



TDA2009A



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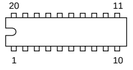
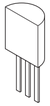
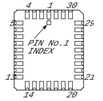
TOP210PF1

TDA8395T/N3

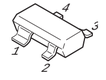


TL431CLP
TL431CLP-Z20



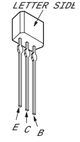


BSS83

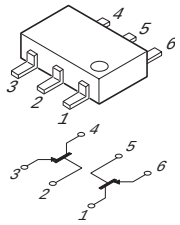


DTA114EKA-T146
DTA124EKA-T146
DTC114EKA-T146
DTC124EKA-T146
DTC144EKA-T146
DTC314TKH04
DTC314TK-T-146
2SA1037K-T-146-R
2SA1162-G
2SC-1623-L5L6
2SC2412K-QR
2SC2412K-T-146-QR

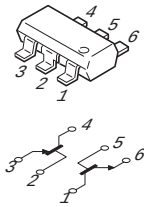
DTC114ESA-TP
JC501-Q-AMMO
JC501TP-Q
2SA933AS-QRT
2SA933AS-RT
2SC2785-HFE



XN4401
XN4401-TX



XN4601
XN4601-TX



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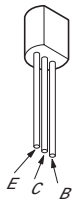
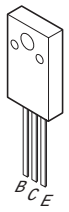
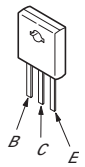


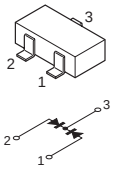
2SC4833-M1



2SD2396H



DAN202K
DAN202K-T-146
MA152WK-TX
STZ6.8T
1SS184



DAP202K
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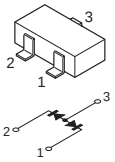
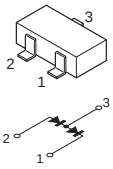
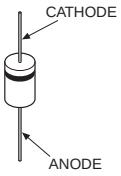


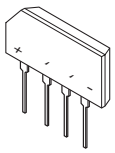
DA204K
DA204K-T-146



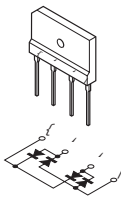
D1NL20-TR
EGP110D
EGP10DPKG23
S2LA20F
1SS133T-77



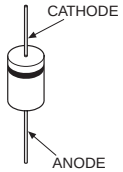
D2SBA60F



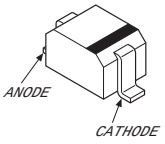
D4SB60L
D4SB60L-F
D10SBS4
D10SBS4F
RBA-406B



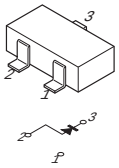
EL1Z
MTZJ-T-77-9.1A
RFP10GPKG23



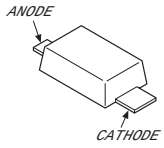
HVU359TRF
MA111
MA111-TX
RD4.7SB
RD4.7SB-T2
RD6.2SB
RD6.2SB-T2
1SV214
1SV214-TPH3
1T363
1T363-04-T8A



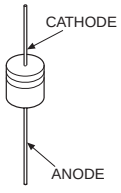
MA3030-H



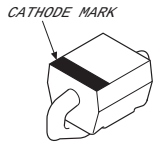
MA729
MA729-TX



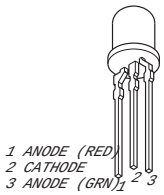
MTZJ-T-77-13B
MTZJ-T-77-15B
MTZJ-T-77-33C
MTZJ-T-77-5.6B
MTZJ-13B
MTZJ-33C
RD15ES-B2
RD30ESB3
RD5.6ESB2
1SS119-25
1SS119-25TD



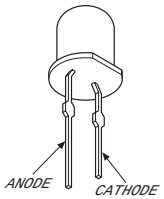
UF4005PLG23



SPR-54MVW



TLR124



SECTION 5
EXPLODED VIEWS

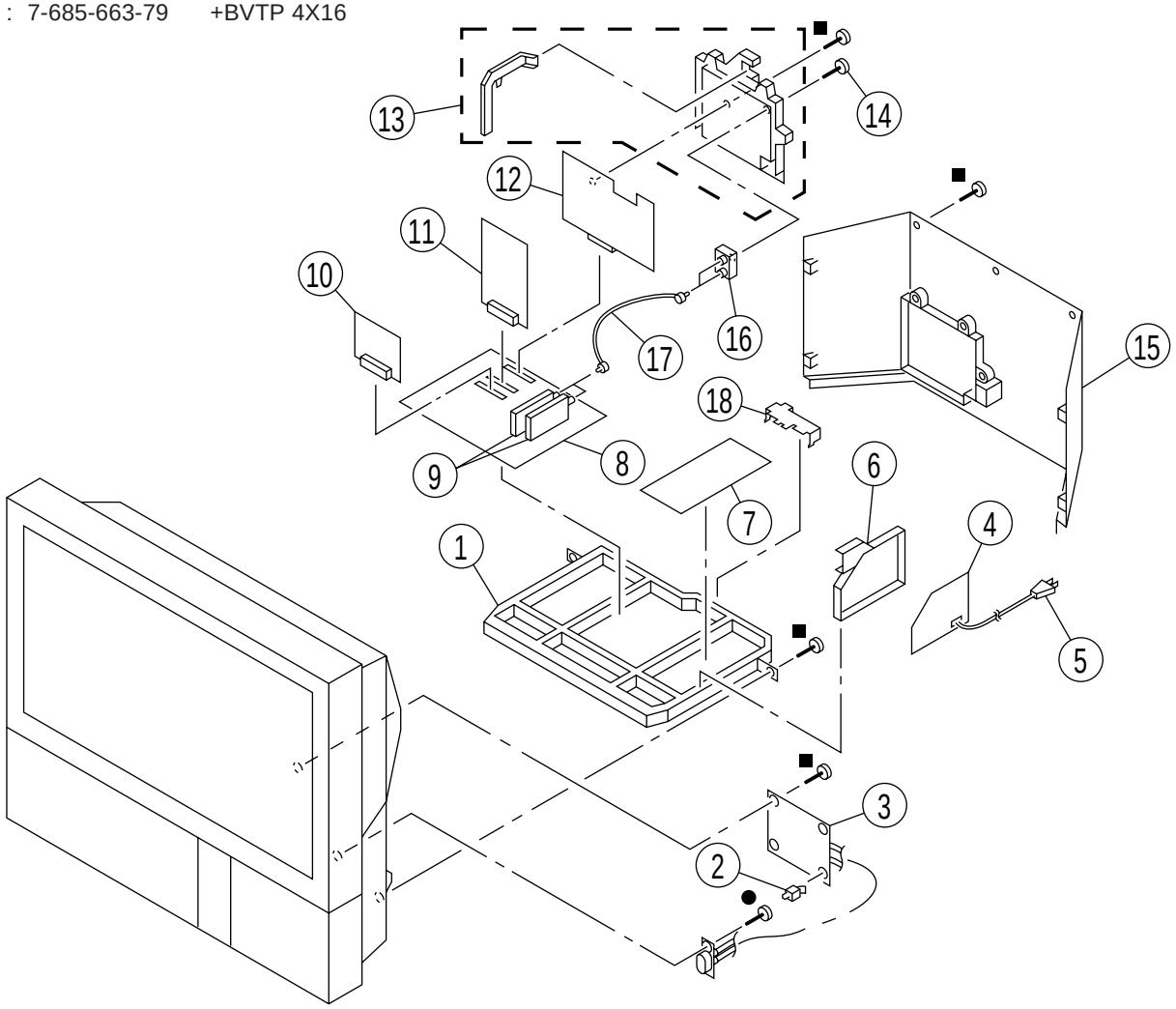
NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

5-1. CHASSIS

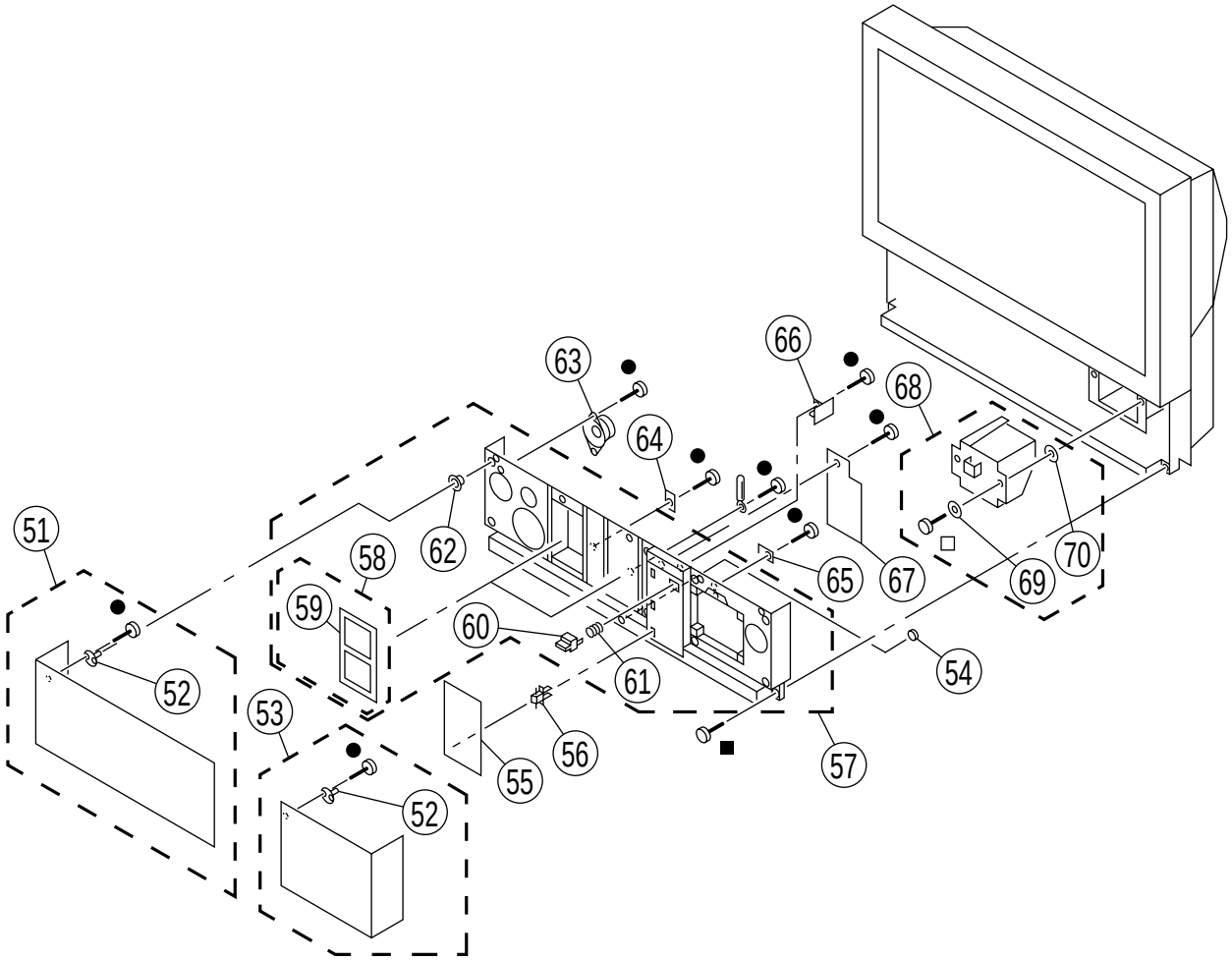
● : 7-685-648-79 +BVTP 3X12
■ : 7-685-663-79 +BVTP 4X16



REF. NO.	PART NO.	DESCRIPTION	REMARK
1	* 4-054-721-01	BRACKET, MAIN	
2	* 3-703-141-00	HOLDER, PWB	
3	⚠ 1-473-545-13	POWER BLOCK	
4	* A-1241-255-A	F2 BOARD, COMPLETE	
5	⚠ 1-776-860-12	POWER COARD, FILTER(UK)	
6	* 4-054-722-01	BRACKET, F2	
7	* A-1311-494-A	G BOARD, COMPLETE	
8	* A-1297-874-A	A BOARD, COMPLETE	
9	⚠ 1-693-340-23	TUNER/VIF	
10	* A-1135-870-A	BB BOARD, COMPLETE	
11	* A-1135-884-A	B1 BOARD, COMPLETE	
12	* A-1388-189-A	J BOARD, COMPLETE	
13	4-054-727-01	TERMINAL BOARD	
14	4-379-611-01	SCREW (M3X8), +B	
15	X-4033-267-2	COVER ASSY, REAR	
16	1-251-372-21	BOOSTER, RF	
17	* 1-777-539-11	CABLE, PIN	
18	4-055-427-01	COVER, AC CORD	

5-2. FRONT COVER

● : 7-685-648-79 +BVTP 3X12
■ : 7-685-663-79 +BVTP 4X16
□ :* 7-683-421-04 HEXAGON SOCKET BOLT 4X12

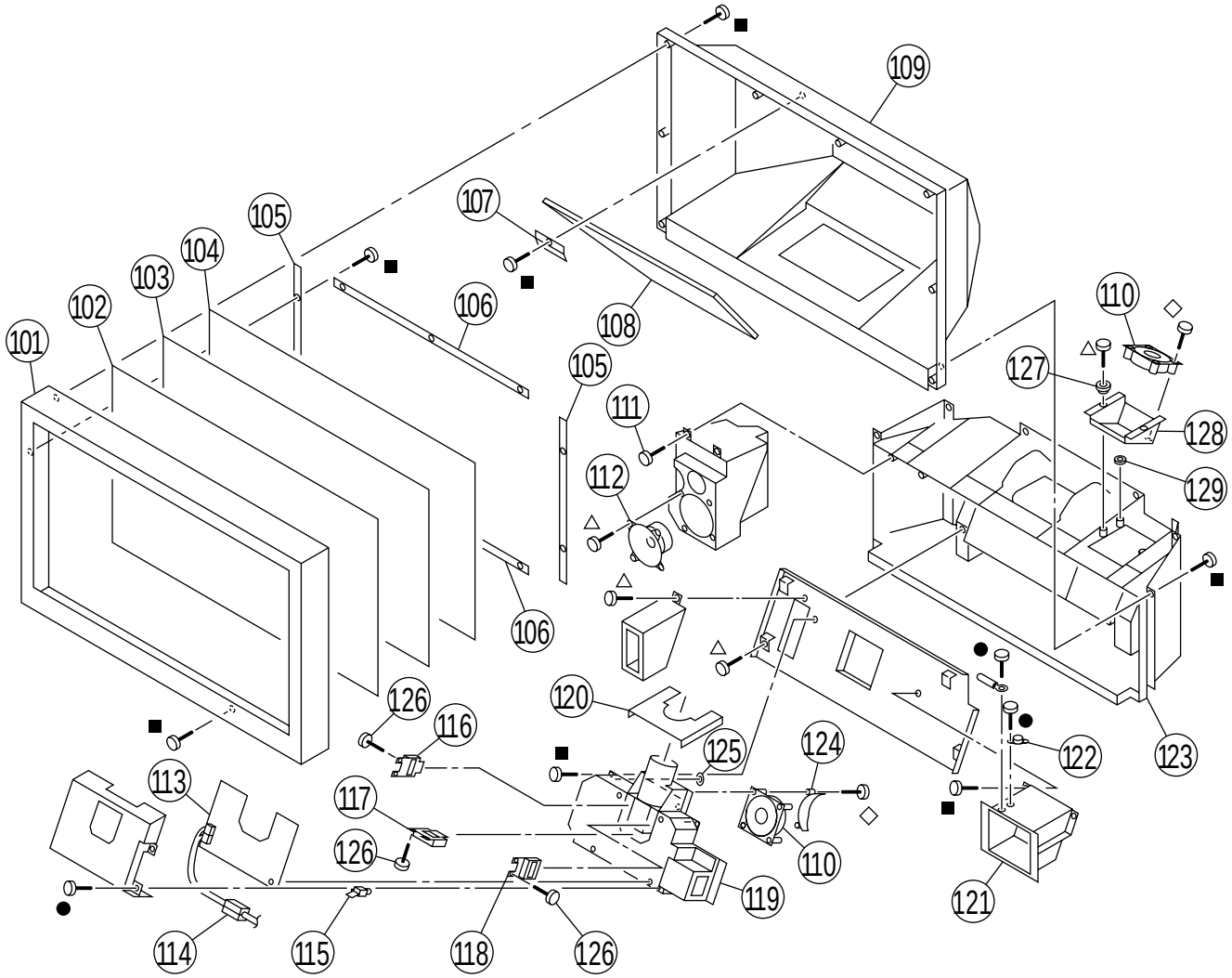


REF. NO.	PART NO.	DESCRIPTION	REMARK
51	X-4200-328-1	PANEL (L) ASSY, FRONT	52
52	4-054-709-01	STRIKE	
53	X-4200-327-1	PANEL (R) ASSY, FRONT	52
54	4-204-021-01	SCREW COVER	
55	X-4200-326-1	DOOR ASSY	
56	3-703-035-11	SHAFT, LID	
57	X-4033-825-1	COVER ASSY, FRONT	58-62
58	X-4034-041-1	FILTER ASSY	59
59	4-051-312-01	FILTER	
60	4-051-285-01	BUTTON, POWER	
61	4-820-917-01	SPRING, COMPRESSION	
62	* 4-838-438-00	LATCH	
63	1-505-207-11	SPEAKER (5.7CM)	
64	* A-1390-622-A	TB BOARD, COMPLETE	
65	* A-1390-621-A	TA BOARD, COMPLETE	
66	* A-1241-256-A	F1 BOARD, COMPLETE	
67	* A-1372-259-A	H BOARD, COMPLETE	
68	A-1501-092-A	LAMP BLOCK ASSY	69, 70
69	3-901-261-01	WASHER	
70	* 3-650-537-00	WASHER	

5-3. SCREEN MIRROR BLOCK AND OPTICS UNIT

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

● : 7-685-648-79 +BVTP 3X12
■ : 7-685-663-79 +BVTP 4X16
△ : 7-685-663-71 +BVTP 4X16
◇ : 7-685-167-19 WASHER HEAD SCREW +PX35



REF. NO.		PART NO.	DESCRIPTION	REMARK
101		X-4200-332-1	FRAME ASSY, SCREEN	
102		4-057-969-11	SCREEN, CONTRAST	
103		4-203-837-01	PLATE (L), DIFFUSION	
104		4-203-836-01	PLATE (F), DIFFUSION	
105	*	4-049-644-01	HOLDER, SCREEN (S1)	
106	*	4-033-782-02	HOLDER (S), SCREEN	
107	*	4-051-296-01	HOLDER, MIRROR	
108		4-051-283-01	MIRROR	
109		X-4033-329-2	COVER ASSY, MIRROR	
110		1-698-696-21	FAN, DC	
111		4-384-096-01	SCREW (4X16), TAPPING, +P	
112		1-505-845-11	SPEAKER (10CM)	
113	*	A-1335-072-A	C BOARD, COMPLETE	
114		1-543-653-11	CORE ASSY, BEAD (DIVISION TYPE)	
115	*	3-703-141-00	HOLDER, PWB	
116		A-1501-135-A	PANEL BLOCK ASSY (B)	
117		A-1501-134-A	PANEL BLOCK ASSY (G)	
118		A-1501-133-A	PANEL BLOCK ASSY (R)	
119	⚠*	1-758-091-12	OPTICAL UNIT	
120	*	4-051-825-11	SHIELD, OPTICAL	
121	*	4-051-343-01	BASE, LAMP	
122	⚠	1-533-746-11	THERMOSTAT	
123	*	X-4033-826-1	CABINET ASSY, BOTTOM	
124	*	4-061-665-01	PLATE, RECTIFIER	
125		4-830-092-01	WASHER, FIBER	
126		4-047-747-21	SCREW, SPACER HEXAGON	
127	*	4-038-987-01	CUSHION, SPEAKER	
128		4-051-316-02	BRACKET, FAN	
129		3-929-943-01	FOOT	

SECTION 6
ELECTRICAL PARTS LIST

BB

NOTE:

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

- The components identified by ⋈ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS
- All resistors are in ohms
- F : nonflammable

When indicating parts by reference number, please include the board name.

- CAPACITORS
  PF : μμ F
- There are some cases the reference number on one board overlaps on the other board. Therefore, when ordering parts by the reference number, please include the board name.

REF. NO.	PART NO.	DESCRIPTION			REMARK
	* A-1135-870-A	BB BOARD, COMPLETE			
		**********			
		<CAPACITOR>			
C3001	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C3002	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C3003	1-135-157-21	TANTAL. CHIP	10MF	20%	6.3V
C3005	1-104-851-11	TANTAL. CHIP	10MF	20%	10V
C3006	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C3007	1-126-206-11	ELECT CHIP	100MF	20%	6.3V
C3008	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C3009	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3010	1-135-157-21	TANTAL. CHIP	10MF	20%	6.3V
C3011	1-126-206-11	ELECT CHIP	100MF	20%	6.3V
C3012	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C3013	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C3014	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C3015	1-135-157-21	TANTAL. CHIP	10MF	20%	6.3V
C3016	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C3017	1-110-569-11	TANTAL. CHIP	47MF	20%	6.3V
C3018	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C3019	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3020	1-135-157-21	TANTAL. CHIP	10MF	20%	6.3V
C3021	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C3022	1-135-157-21	TANTAL. CHIP	10MF	20%	6.3V
C3023	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C3024	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C3025	1-110-569-11	TANTAL. CHIP	47MF	20%	6.3V
C3026	1-126-206-11	ELECT CHIP	100MF	20%	6.3V
C3027	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C3028	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C3029	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3030	1-126-206-11	ELECT CHIP	100MF	20%	6.3V
C3031	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C3032	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C3033	1-135-157-21	TANTAL. CHIP	10MF	20%	6.3V
C3035	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C3036	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C3038	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C3039	1-135-157-21	TANTAL. CHIP	10MF	20%	6.3V
C3040	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C3041	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C3044	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3045	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3046	1-135-157-21	TANTAL. CHIP	10MF	20%	6.3V
C3047	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3048	1-135-157-21	TANTAL. CHIP	10MF	20%	6.3V
C3049	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C3050	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3051	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3052	1-135-157-21	TANTAL. CHIP	10MF	20%	6.3V
C3054	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3055	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C3056	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C3057	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C3058	1-110-569-11	TANTAL. CHIP	47MF	20%	6.3V
C3059	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3060	1-163-091-00	CERAMIC CHIP	8PF	0.25PF	50V
C3061	1-135-210-11	TANTAL. CHIP	4.7MF	20%	10V
C3062	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C3070	1-135-157-21	TANTAL. CHIP	10MF	20%	6.3V
C3071	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C3072	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3073	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3074	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3075	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3076	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C3077	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C3078	1-104-559-11	FILM CHIP	0.047MF	5%	16V
C3079	1-135-145-11	TANTAL. CHIP	0.47MF	20%	25V
C3091	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C3092	1-126-205-11	ELECT CHIP	47MF	20%	6.3V
C3093	1-124-778-00	ELECT CHIP	22MF	20%	6.3V
C3094	1-124-778-00	ELECT CHIP	22MF	20%	6.3V
C3095	1-124-778-00	ELECT CHIP	22MF	20%	6.3V
C3096	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3097	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C3100	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C3101	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3102	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3103	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
		<CONNECTOR>			
CN3001	1-695-301-11	CONNECTOR, BOARD TO BOARD 40P			
		<DIODE>			
D3001	8-719-158-19	DIODE RD6.2SB			
D3002	8-719-158-19	DIODE RD6.2SB			
D3003	8-719-158-19	DIODE RD6.2SB			
D3004	8-719-404-49	DIODE MA111			
D3005	8-719-404-49	DIODE MA111			
		<FERRITE BEAD>			
FB3001	1-543-813-21	FERRITE	0UH		
FB3002	1-543-813-21	FERRITE	0UH		
FB3003	1-543-813-21	FERRITE	0UH		
FB3004	1-543-813-21	FERRITE	0UH		
FB3005	1-543-813-21	FERRITE	0UH		
FB3006	1-543-813-21	FERRITE	0UH		
FB3007	1-543-813-21	FERRITE	0UH		
		<FILTER>			
FL3001	1-233-512-21	FERRITE	37UH		
FL3002	1-233-512-21	FERRITE	37UH		
FL3003	1-233-512-21	FERRITE	37UH		

BB

REF. NO.	PART NO.	DESCRIPTION			REMARK
FL3004	1-233-512-21	FERRITE	37UH		
FL3005	1-233-512-21	FERRITE	37UH		
FL3006	1-233-512-21	FERRITE	37UH		
FL3008	1-233-512-21	FERRITE	37UH		
FL3009	1-233-512-21	FERRITE	37UH		
FL3010	1-233-512-21	FERRITE	37UH		
FL3011	1-233-512-21	FERRITE	37UH		
FL3012	1-233-446-11	FILTER, LOW PASS			
FL3013	1-236-620-11	FILTER, LOW PASS			
FL3014	1-236-620-11	FILTER, LOW PASS			
FL3015	1-233-435-11	FILTER, LOW PASS			
FL3016	1-233-435-11	FILTER, LOW PASS			
FL3017	1-233-435-11	FILTER, LOW PASS			
		<IC>			
IC3001	8-752-337-04	IC CXD1176Q			
IC3002	8-752-337-04	IC CXD1176Q			
IC3003	8-752-337-04	IC CXD1176Q			
IC3004	8-752-338-46	IC CXD1178Q			
IC3005	8-759-398-16	IC MC74HCU04DR2			
IC3006	8-759-398-17	IC MC74HC04ADR2			
IC3007	8-752-365-06	IC CXK48324R-1			
IC3008	8-752-377-13	IC CXD2428Q			
IC3009	8-759-295-09	IC TLC2932IPW			
IC3010	8-752-365-06	IC CXK48324R-1			
IC3011	8-759-083-94	IC TC7W74FU			
IC3012	8-752-360-44	IC CXK1203AR			
IC3013	8-752-360-44	IC CXK1203AR			
IC3014	8-752-360-44	IC CXK1203AR			
IC3015	8-752-379-90	IC CXD2066Q			
IC3016	8-759-082-59	IC TC7W32FU			
		<CHIP CONDUCTOR>			
JR2	1-216-295-00	SHORT	0		
JR4	1-216-295-00	SHORT	0		
		<COIL>			
L3001	1-412-031-11	INDUCTOR CHIP 47UH			
L3002	1-412-031-11	INDUCTOR CHIP 47UH			
L3004	1-410-192-51	INDUCTOR CHIP 1UH			
L3007	1-216-158-00	RES,CHIP	22	5%	1/8W
L3008	1-412-031-11	INDUCTOR CHIP 47UH			
L3009	1-412-031-11	INDUCTOR CHIP 47UH			
L3010	1-412-031-11	INDUCTOR CHIP 47UH			
		<TRANSISTOR>			
Q3001	8-729-216-22	TRANSISTOR 2SA1162-G			
Q3002	8-729-216-22	TRANSISTOR 2SA1162-G			
Q3003	8-729-216-22	TRANSISTOR 2SA1162-G			
Q3004	8-729-216-22	TRANSISTOR 2SA1162-G			
Q3005	8-729-216-22	TRANSISTOR 2SA1162-G			
Q3006	8-729-216-22	TRANSISTOR 2SA1162-G			
Q3007	8-729-620-06	TRANSISTOR 2SC3052-EF			
Q3015	8-729-216-22	TRANSISTOR 2SA1162-G			
Q3016	8-729-216-22	TRANSISTOR 2SA1162-G			
Q3017	8-729-216-22	TRANSISTOR 2SA1162-G			
Q3018	8-729-620-06	TRANSISTOR 2SC3052-EF			
Q3019	8-729-620-06	TRANSISTOR 2SC3052-EF			
Q3020	8-729-620-06	TRANSISTOR 2SC3052-EF			
Q3021	8-729-216-22	TRANSISTOR 2SA1162-G			
Q3022	8-729-620-06	TRANSISTOR 2SC3052-EF			
Q3023	8-729-216-22	TRANSISTOR 2SA1162-G			
Q3024	8-729-620-06	TRANSISTOR 2SC3052-EF			

REF. NO.	PART NO.	DESCRIPTION			REMARK
		<RESISTOR>			
R3001	1-216-025-00	RES,CHIP	100	5%	1/10W
R3002	1-216-023-00	RES,CHIP	82	5%	1/10W
R3003	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R3004	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W
R3005	1-216-025-00	RES,CHIP	100	5%	1/10W
R3006	1-216-023-00	RES,CHIP	82	5%	1/10W
R3007	1-216-025-00	RES,CHIP	100	5%	1/10W
R3008	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3009	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3010	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3011	1-216-025-00	RES,CHIP	100	5%	1/10W
R3012	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3013	1-216-025-00	RES,CHIP	100	5%	1/10W
R3014	1-216-025-00	RES,CHIP	100	5%	1/10W
R3015	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3017	1-216-025-00	RES,CHIP	100	5%	1/10W
R3018	1-216-025-00	RES,CHIP	100	5%	1/10W
R3019	1-216-025-00	RES,CHIP	100	5%	1/10W
R3020	1-216-025-00	RES,CHIP	100	5%	1/10W
R3021	1-216-023-00	RES,CHIP	82	5%	1/10W
R3022	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3023	1-216-037-00	RES,CHIP	330	5%	1/10W
R3024	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3025	1-216-001-00	RES,CHIP	10	5%	1/10W
R3026	1-216-025-00	RES,CHIP	100	5%	1/10W
R3027	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R3028	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R3029	1-216-679-11	METAL CHIP	15K	0.50%	1/10W
R3030	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R3031	1-216-037-00	RES,CHIP	330	5%	1/10W
R3032	1-216-001-00	RES,CHIP	10	5%	1/10W
R3033	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W
R3034	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R3035	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R3036	1-216-037-00	RES,CHIP	330	5%	1/10W
R3037	1-216-001-00	RES,CHIP	10	5%	1/10W
R3038	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R3039	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R3040	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3041	1-208-845-11	RES,CHIP	1M	5%	1/10W
R3042	1-216-025-00	RES,CHIP	100	5%	1/10W
R3043	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3044	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3045	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3046	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3047	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3048	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3049	1-216-025-00	RES,CHIP	100	5%	1/10W
R3050	1-216-025-00	RES,CHIP	100	5%	1/10W
R3051	1-216-295-00	SHORT	0		
R3053	1-216-627-11	METAL CHIP	100	0.50%	1/10W
R3054	1-216-629-11	METAL CHIP	120	0.50%	1/10W
R3055	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R3056	1-216-648-11	METAL CHIP	750	0.50%	1/10W
R3057	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R3058	1-216-295-00	SHORT	0		
R3059	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R3060	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R3061	1-216-642-11	METAL CHIP	430	0.50%	1/10W
R3063	1-216-113-00	RES,CHIP	470K	5%	1/10W
R3064	1-216-097-00	RES,CHIP	100K	5%	1/10W
R3065	1-216-085-00	RES,CHIP	33K	5%	1/10W
R3066	1-216-075-00	RES,CHIP	12K	5%	1/10W
R3067	1-216-071-00	RES,CHIP	8.2K	5%	1/10W
R3068	1-216-075-00	RES,CHIP	12K	5%	1/10W
R3069	1-216-041-00	RES,CHIP	470	5%	1/10W
R3070	1-216-061-00	RES,CHIP	3.3K	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R3071	1-216-049-00	RES,CHIP	1K	5%	1/10W
R3072	1-216-041-00	RES,CHIP	470	5%	1/10W
R3073	1-216-113-00	RES,CHIP	470K	5%	1/10W
R3075	1-216-043-91	RES,CHIP	560	5%	1/10W
R3076	1-216-041-00	RES,CHIP	470	5%	1/10W
R3077	1-216-075-00	RES,CHIP	12K	5%	1/10W
R3078	1-216-071-00	RES,CHIP	8.2K	5%	1/10W
R3080	1-216-071-00	RES,CHIP	8.2K	5%	1/10W
R3081	1-216-037-00	RES,CHIP	330	5%	1/10W
R3082	1-216-043-91	RES,CHIP	560	5%	1/10W
R3083	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R3084	1-216-037-00	RES,CHIP	330	5%	1/10W
R3085	1-216-043-91	RES,CHIP	560	5%	1/10W
R3086	1-216-041-00	RES,CHIP	470	5%	1/10W
R3087	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R3090	1-216-041-00	RES,CHIP	470	5%	1/10W
R3091	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R3092	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3093	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3094	1-216-025-00	RES,CHIP	100	5%	1/10W
R3096	1-216-089-00	RES,CHIP	47K	5%	1/10W
R3097	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R3098	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3099	1-216-075-00	RES,CHIP	12K	5%	1/10W
R3100	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3101	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3102	1-216-049-00	RES,CHIP	1K	5%	1/10W
		<CRYSTAL>			
X3001	1-579-619-23	VIBRATOR, CRYSTAL			

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* A-1135-884-A B1 BOARD, COMPLETE
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<CAPACITOR>

C4001	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C4002	1-126-959-11	ELECT	0.47MF	20%	50V
C4003	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C4004	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4005	1-104-664-11	ELECT	47MF	20%	16V
C4006	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4007	1-104-665-11	ELECT	100MF	20%	25V
C4008	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C4009	1-110-501-11	CERAMIC CHIP	0.33MF	10%	16V
C4010	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C4011	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C4012	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C4013	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C4014	1-110-501-11	CERAMIC CHIP	0.33MF	10%	16V
C4015	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C4016	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C4017	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4018	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4019	1-104-664-11	ELECT	47MF	20%	16V
C4020	1-110-501-11	CERAMIC CHIP	0.33MF	10%	16V
C4021	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C4022	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C4023	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C4024	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4029	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4030	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4031	1-126-964-11	ELECT	10MF	20%	50V
C4032	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4033	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4034	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4035	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4036	1-126-964-11	ELECT	10MF	20%	50V
C4037	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4038	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4039	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4042	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4043	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4044	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4045	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4046	1-163-092-00	CERAMIC CHIP	9PF	0.25PF	50V
C4047	1-163-137-00	CERAMIC CHIP	680PF	5%	50V
C4048	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C4049	1-163-137-00	CERAMIC CHIP	680PF	5%	50V
C4050	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4051	1-104-664-11	ELECT	47MF	20%	16V
C4052	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C4053	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C4054	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C4055	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C4056	1-163-253-11	CERAMIC CHIP	120PF	5%	50V
C4057	1-126-964-11	ELECT	10MF	20%	50V
C4058	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4059	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4060	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4061	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4062	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4063	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4064	1-126-964-11	ELECT	10MF	20%	50V
C4065	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4066	1-126-964-11	ELECT	10MF	20%	50V
C4067	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4068	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4069	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4070	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4071	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4072	1-126-934-11	ELECT	220MF	20%	10V
C4073	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4074	1-126-934-11	ELECT	220MF	20%	10V
C4077	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4078	1-126-934-11	ELECT	220MF	20%	10V
C4079	1-126-934-11	ELECT	220MF	20%	10V
C4080	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4081	1-126-934-11	ELECT	220MF	20%	10V
C4082	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4083	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4084	1-126-950-11	ELECT	330MF	20%	35V
C4085	1-126-964-11	ELECT	10MF	20%	50V
C4086	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4087	1-104-664-11	ELECT	47MF	20%	16V
C4100	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4101	1-163-245-11	CERAMIC CHIP	56PF	5%	50V
C4102	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C4103	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4104	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4105	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C4106	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4107	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4108	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C4109	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4110	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4111	1-126-964-11	ELECT	10MF	20%	50V
C4112	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C4113	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4114	1-126-964-11	ELECT	10MF	20%	50V
C4115	1-126-964-11	ELECT	10MF	20%	50V
C4116	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4117	1-126-964-11	ELECT	10MF	20%	50V

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REF. NO.	PART NO.	DESCRIPTION			REMARK
C4118	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4119	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4120	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C4121	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C4122	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4123	1-163-233-11	CERAMIC CHIP	18PF	5%	50V
C4124	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C4125	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C4126	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C4127	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C4128	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4129	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C4130	1-126-964-11	ELECT	10MF	20%	50V
C4131	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C4136	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C4137	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4138	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4139	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4140	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4141	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4142	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4143	1-126-924-11	ELECT	330MF	20%	10V
C4144	1-110-501-11	CERAMIC CHIP	0.33MF	10%	16V
C4145	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4146	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C4147	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4149	1-163-037-11	CERAMIC CHIP	0.022MF	10%	50V
C4150	1-104-664-11	ELECT	47MF	20%	16V
C4151	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4152	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C4153	1-163-137-00	CERAMIC CHIP	680PF	5%	50V
C4154	1-163-096-00	CERAMIC CHIP	13PF	5%	50V
C4155	1-163-137-00	CERAMIC CHIP	680PF	5%	50V
C4156	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C4157	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C4158	1-104-664-11	ELECT	47MF	20%	16V
C4159	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4160	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C4161	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C4162	1-163-253-11	CERAMIC CHIP	120PF	5%	50V
C4163	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4164	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4165	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4166	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4167	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4168	1-126-964-11	ELECT	10MF	20%	50V
C4169	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4170	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4171	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4172	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4173	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4174	1-126-964-11	ELECT	10MF	20%	50V
C4175	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C4176	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4177	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4178	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C4179	1-126-959-11	ELECT	0.47MF	20%	50V
C4180	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C4181	1-104-664-11	ELECT	47MF	20%	16V
C4182	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4183	1-104-665-11	ELECT	100MF	20%	25V
C4184	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4185	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C4186	1-110-501-11	CERAMIC CHIP	0.33MF	10%	16V
C4187	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C4188	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C4189	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C4190	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V

REF. NO.	PART NO.	DESCRIPTION			REMARK
C4191	1-110-501-11	CERAMIC CHIP	0.33MF	10%	16V
C4192	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C4193	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C4195	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4196	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C4197	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C4198	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C4199	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4200	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4201	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C4202	1-163-245-11	CERAMIC CHIP	56PF	5%	50V
C4203	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4204	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4205	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C4206	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4207	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C4208	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4209	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4210	1-126-964-11	ELECT	10MF	20%	50V
C4211	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C4212	1-126-964-11	ELECT	10MF	20%	50V
C4213	1-126-964-11	ELECT	10MF	20%	50V
C4214	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4215	1-126-964-11	ELECT	10MF	20%	50V
C4216	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4217	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4218	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C4220	1-163-233-11	CERAMIC CHIP	18PF	5%	50V
C4221	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4222	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C4223	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C4224	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C4225	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C4226	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C4227	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4228	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C4229	1-126-964-11	ELECT	10MF	20%	50V
C4230	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C4231	1-110-501-11	CERAMIC CHIP	0.33MF	10%	16V
C4232	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4233	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4234	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4235	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4236	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4237	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4239	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4240	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C4241	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4242	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4243	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4245	1-126-964-11	ELECT	10MF	20%	50V
C4246	1-126-965-11	ELECT	22MF	20%	50V
C4247	1-164-346-11	CERAMIC CHIP	1MF		16V
C4248	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4249	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4250	1-126-964-11	ELECT	10MF	20%	50V
C4251	1-126-964-11	ELECT	10MF	20%	50V
C4252	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4253	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4254	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C4255	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C4257	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4258	1-163-143-00	CERAMIC CHIP	0.0012MF	5%	50V
C4261	1-163-253-11	CERAMIC CHIP	120PF	5%	50V
C4262	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4263	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4264	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4265	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4266	1-163-038-00	CERAMIC CHIP	0.1MF		25V

REF. NO.	PART NO.	DESCRIPTION			REMARK
C4267	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4268	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4269	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4270	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4271	1-163-257-11	CERAMIC CHIP	180PF	5%	50V
C4272	1-163-257-11	CERAMIC CHIP	180PF	5%	50V
C4273	1-163-257-11	CERAMIC CHIP	180PF	5%	50V
C4274	1-163-253-11	CERAMIC CHIP	120PF	5%	50V
C4275	1-126-934-11	ELECT	220MF	20%	10V
C4276	1-126-934-11	ELECT	220MF	20%	10V
C4277	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C4278	1-124-442-00	ELECT	330MF	20%	6.3V
C4279	1-124-442-00	ELECT	330MF	20%	6.3V
		<CONNECTOR>			
CN1016	1-695-301-11	CONNECTOR, BOARD TO BOARD 40P			
		<DIODE>			
D303	8-719-404-49	DIODE MA111			
D4003	8-719-991-33	DIODE 1SS133T-77			
D4004	8-719-031-68	DIODE HVU359TRF			
D4005	8-719-914-43	DIODE DAN202K			
D4006	8-719-404-49	DIODE MA111			
D4007	8-719-031-68	DIODE HVU359TRF			
D4008	8-719-914-43	DIODE DAN202K			
D4009	8-719-914-43	DIODE DAN202K			
D4010	8-719-031-68	DIODE HVU359TRF			
D4011	8-719-031-68	DIODE HVU359TRF			
D4014	8-719-404-49	DIODE MA111			
D4015	8-719-914-43	DIODE DAN202K			
D4016	8-719-914-43	DIODE DAN202K			
D4017	8-719-914-43	DIODE DAN202K			
D4018	8-719-404-49	DIODE MA111			
D4019	8-719-031-68	DIODE HVU359TRF			
D4020	8-719-031-68	DIODE HVU359TRF			
D4022	8-719-404-49	DIODE MA111			
D4023	8-719-404-49	DIODE MA111			
		<FILTER>			
FL4001	1-233-436-11	FILTER, LOW PASS			
FL4002	1-233-436-11	FILTER, LOW PASS			
FL4003	1-233-435-11	FILTER, LOW PASS			
FL4004	1-233-435-11	FILTER, LOW PASS			
FL4005	1-233-435-11	FILTER, LOW PASS			
FL4006	1-233-434-11	FILTER, LOW PASS			
FL4008	1-233-434-11	FILTER, LOW PASS			
FL4009	1-233-434-11	FILTER, LOW PASS			
FL4013	1-233-435-11	FILTER, LOW PASS			
FL4014	1-233-436-11	FILTER, LOW PASS			
FL4015	1-233-436-11	FILTER, LOW PASS			
FL4016	1-233-434-11	FILTER, LOW PASS			
FL4017	1-233-736-21	FILTER, EMI			
FL4018	1-233-736-21	FILTER, EMI			
FL4019	1-233-736-21	FILTER, EMI			
FL4020	1-233-736-21	FILTER, EMI			
FL4021	1-233-736-21	FILTER, EMI			
FL4022	1-233-736-21	FILTER, EMI			
FL4023	1-233-736-21	FILTER, EMI			
FL4024	1-233-736-21	FILTER, EMI			
FL4025	1-233-736-21	FILTER, EMI			
		<IC>			
IC4001	8-752-068-39	IC CXA1840S			
IC4002	8-759-183-36	IC TDA8443B			

REF. NO.	PART NO.	DESCRIPTION	REMARK
IC4003	8-752-369-84	IC CXD2309Q-T6	
IC4004	8-752-369-15	IC CXD2030R	
IC4005	8-752-352-09	IC CXD2300Q	
IC4006	8-752-070-58	IC CXA1860Q-T4	
IC4007	8-759-430-79	IC TDA8395T/N3	
IC4008	8-759-981-61	IC LM2901M	
IC4009	8-759-398-17	IC MC74HC04ADR2	
IC4010	8-752-370-85	IC CXD2032Q-TL	
IC4011	8-752-369-15	IC CXD2030R	
IC4012	8-752-352-09	IC CXD2300Q	
IC4013	8-752-068-39	IC CXA1840S	
IC4014	8-752-070-58	IC CXA1860Q-T4	
IC4015	8-759-430-79	IC TDA8395T/N3	
IC4016	8-759-981-61	IC LM2901M	
IC4017	8-759-398-19	IC MC74HC4053DWR2	
IC4018	8-752-338-46	IC CXD1178Q	
IC4019	8-752-337-04	IC CXD1176Q	
IC4020	8-752-337-04	IC CXD1176Q	
IC4021	8-759-352-06	IC CXD2031R-65846GJ0153EN	
IC4022	8-759-398-19	IC MC74HC4053DWR2	
IC4023	8-759-009-02	IC MC14046BF	
IC4024	8-759-234-77	IC TC4S66F	
IC4025	8-759-352-05	IC MSM548332-30TS-K	
IC4026	8-759-398-17	IC MC74HC04ADR2	
IC4027	8-759-510-71	IC BA10358F-E2	
IC4028	8-759-398-16	IC MC74HCU04DR2	
		<COIL>	
L4001	1-408-591-11	INDUCTOR 1UH	
L4002	1-408-591-11	INDUCTOR 1UH	
L4004	1-414-248-11	INDUCTOR 2.2UH	
L4005	1-408-591-11	INDUCTOR 1UH	
L4006	1-408-591-11	INDUCTOR 1UH	
L4007	1-408-595-31	INDUCTOR 2.2UH	
L4008	1-408-595-31	INDUCTOR 2.2UH	
L4011	1-408-595-31	INDUCTOR 2.2UH	
L4012	1-408-595-31	INDUCTOR 2.2UH	
L4013	1-408-591-11	INDUCTOR 1UH	
L4014	1-408-591-11	INDUCTOR 1UH	
L4015	1-408-591-11	INDUCTOR 1UH	
L4016	1-408-591-11	INDUCTOR 1UH	
L4018	1-408-591-11	INDUCTOR 1UH	
L4019	1-414-248-11	INDUCTOR 2.2UH	
L4020	1-408-591-11	INDUCTOR 1UH	
L4021	1-408-599-31	INDUCTOR 4.7UH	
L4022	1-408-599-31	INDUCTOR 4.7UH	
L4023	1-414-248-11	INDUCTOR 2.2UH	
L4024	1-414-248-11	INDUCTOR 2.2UH	
L4025	1-408-591-11	INDUCTOR 1UH	
L4026	1-408-591-11	INDUCTOR 1UH	
L4027	1-412-003-41	INDUCTOR CHIP 5.6UH	
L4028	1-414-248-11	INDUCTOR 2.2UH	
L4029	1-414-248-11	INDUCTOR 2.2UH	
L4030	1-414-248-11	INDUCTOR 2.2UH	
L4031	1-408-595-31	INDUCTOR 2.2UH	
L4032	1-408-595-31	INDUCTOR 2.2UH	
		<TRANSISTOR>	
Q4001	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4002	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4003	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4004	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4005	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4006	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4007	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4008	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4009	8-729-216-22	TRANSISTOR 2SA1162-G	

B1

REF. NO.	PART NO.	DESCRIPTION	REMARK
Q4010	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4011	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4013	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q4014	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q4015	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4016	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q4017	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q4018	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4020	8-729-900-53	TRANSISTOR DTC114EK	
Q4021	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q4022	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4023	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4024	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q4025	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q4026	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q4027	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q4028	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q4029	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q4030	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q4031	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q4032	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q4034	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4035	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4036	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4038	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q4039	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4040	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q4043	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4045	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4046	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4047	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q4048	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q4049	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q4050	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q4051	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q4052	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q4053	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q4054	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q4055	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q4056	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q4057	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4058	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4059	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4060	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4061	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4062	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4063	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4064	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q4065	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q4067	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q4068	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q4070	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q4071	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q4072	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q4073	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q4074	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4075	8-729-900-53	TRANSISTOR DTC114EK	
Q4076	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q4077	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4078	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q4079	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q4080	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4081	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q4082	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4083	8-729-900-53	TRANSISTOR DTC114EK	
Q4084	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q4085	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4086	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q4087	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4088	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q4089	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q4090	8-729-900-53	TRANSISTOR DTC114EK	
Q4091	8-729-900-53	TRANSISTOR DTC114EK	
Q4092	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q4093	8-729-920-59	TRANSISTOR IMX2	

<RESISTOR>

R4001	1-216-077-00	RES,CHIP	15K	5%	1/10W
R4002	1-216-045-00	RES,CHIP	680	5%	1/10W
R4003	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R4004	1-216-085-00	RES,CHIP	33K	5%	1/10W
R4005	1-216-673-11	METAL CHIP	8.2K	0.50%	1/10W
R4007	1-216-033-00	RES,CHIP	220	5%	1/10W
R4009	1-216-037-00	RES,CHIP	330	5%	1/10W
R4010	1-216-045-00	RES,CHIP	680	5%	1/10W
R4011	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R4012	1-216-073-00	RES,CHIP	10K	5%	1/10W
R4013	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R4014	1-216-025-00	RES,CHIP	100	5%	1/10W
R4015	1-216-089-00	RES,CHIP	47K	5%	1/10W
R4016	1-216-133-00	RES,CHIP	3.3M	5%	1/10W
R4017	1-216-033-00	RES,CHIP	220	5%	1/10W
R4018	1-216-033-00	RES,CHIP	220	5%	1/10W
R4019	1-216-079-00	RES,CHIP	18K	5%	1/10W
R4020	1-216-075-00	RES,CHIP	12K	5%	1/10W
R4021	1-216-075-00	RES,CHIP	12K	5%	1/10W
R4022	1-216-073-00	RES,CHIP	10K	5%	1/10W
R4023	1-216-097-00	RES,CHIP	100K	5%	1/10W
R4024	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4025	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R4026	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R4027	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R4028	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R4029	1-216-081-00	RES,CHIP	22K	5%	1/10W
R4030	1-216-081-00	RES,CHIP	22K	5%	1/10W
R4031	1-216-033-00	RES,CHIP	220	5%	1/10W
R4032	1-216-033-00	RES,CHIP	220	5%	1/10W
R4033	1-216-025-00	RES,CHIP	100	5%	1/10W
R4034	1-216-033-00	RES,CHIP	220	5%	1/10W
R4035	1-216-033-00	RES,CHIP	220	5%	1/10W
R4036	1-216-033-00	RES,CHIP	220	5%	1/10W
R4040	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R4041	1-216-033-00	RES,CHIP	220	5%	1/10W
R4042	1-216-043-91	RES,CHIP	560	5%	1/10W
R4044	1-216-045-00	RES,CHIP	680	5%	1/10W
R4045	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R4046	1-216-045-00	RES,CHIP	680	5%	1/10W
R4047	1-216-669-11	METAL CHIP	5.6K	0.50%	1/10W
R4048	1-216-045-00	RES,CHIP	680	5%	1/10W
R4049	1-216-669-11	METAL CHIP	5.6K	0.50%	1/10W
R4050	1-216-645-11	METAL CHIP	560	0.50%	1/10W
R4051	1-216-045-00	RES,CHIP	680	5%	1/10W
R4052	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R4053	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R4054	1-216-045-00	RES,CHIP	680	5%	1/10W
R4055	1-216-645-11	METAL CHIP	560	0.50%	1/10W
R4056	1-216-043-91	RES,CHIP	560	5%	1/10W
R4057	1-216-045-00	RES,CHIP	680	5%	1/10W
R4058	1-216-632-11	METAL CHIP	160	0.50%	1/10W
R4059	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W
R4060	1-216-660-11	METAL CHIP	2.4K	0.50%	1/10W
R4061	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W
R4062	1-216-091-00	RES,CHIP	56K	5%	1/10W
R4063	1-216-097-00	RES,CHIP	100K	5%	1/10W
R4064	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4065	1-216-049-00	RES,CHIP	1K	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R4066	1-216-097-00	RES,CHIP	100K	5%	1/10W
R4067	1-216-091-00	RES,CHIP	56K	5%	1/10W
R4068	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R4069	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R4070	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R4071	1-216-043-91	RES,CHIP	560	5%	1/10W
R4072	1-216-647-11	METAL CHIP	680	0.50%	1/10W
R4073	1-216-636-11	METAL CHIP	240	0.50%	1/10W
R4074	1-216-097-00	RES,CHIP	100K	5%	1/10W
R4075	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4076	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4077	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4078	1-216-075-00	RES,CHIP	12K	5%	1/10W
R4079	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R4080	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4081	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R4082	1-216-664-11	METAL CHIP	3.6K	0.50%	1/10W
R4083	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R4084	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R4085	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R4086	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R4087	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R4089	1-216-075-00	RES,CHIP	12K	5%	1/10W
R4090	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R4091	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4093	1-216-647-11	METAL CHIP	680	0.50%	1/10W
R4094	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R4095	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R4096	1-216-043-91	RES,CHIP	560	5%	1/10W
R4098	1-216-636-11	METAL CHIP	240	0.50%	1/10W
R4099	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R4100	1-216-073-00	RES,CHIP	10K	5%	1/10W
R4101	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R4102	1-216-073-00	RES,CHIP	10K	5%	1/10W
R4103	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R4104	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4105	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4106	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R4107	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4108	1-216-097-00	RES,CHIP	100K	5%	1/10W
R4109	1-216-105-00	RES,CHIP	220K	5%	1/10W
R4110	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4111	1-216-073-00	RES,CHIP	10K	5%	1/10W
R4112	1-216-648-11	METAL CHIP	750	0.50%	1/10W
R4113	1-216-636-11	METAL CHIP	240	0.50%	1/10W
R4114	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R4115	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R4116	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R4117	1-216-626-11	METAL CHIP	91	0.50%	1/10W
R4118	1-216-650-11	METAL CHIP	910	0.50%	1/10W
R4119	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R4120	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4121	1-216-083-00	RES,CHIP	27K	5%	1/10W
R4122	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R4123	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4124	1-216-073-00	RES,CHIP	10K	5%	1/10W
R4125	1-216-073-00	RES,CHIP	10K	5%	1/10W
R4126	1-216-081-00	RES,CHIP	22K	5%	1/10W
R4127	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R4128	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4129	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R4130	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R4131	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4132	1-216-085-00	RES,CHIP	33K	5%	1/10W
R4133	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R4134	1-216-073-00	RES,CHIP	10K	5%	1/10W
R4135	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R4136	1-216-053-00	RES,CHIP	1.5K	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R4137	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R4138	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R4139	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4140	1-216-025-00	RES,CHIP	100	5%	1/10W
R4141	1-216-681-11	METAL CHIP	18K	0.50%	1/10W
R4142	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R4143	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R4144	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R4145	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4146	1-208-845-11	RES,CHIP	1M	5%	1/10W
R4147	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R4148	1-216-071-00	RES,CHIP	8.2K	5%	1/10W
R4149	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R4150	1-216-085-00	RES,CHIP	33K	5%	1/10W
R4151	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R4152	1-216-071-00	RES,CHIP	8.2K	5%	1/10W
R4153	1-216-073-00	RES,CHIP	10K	5%	1/10W
R4154	1-216-077-00	RES,CHIP	15K	5%	1/10W
R4155	1-216-091-00	RES,CHIP	56K	5%	1/10W
R4157	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4158	1-208-845-11	RES,CHIP	1M	5%	1/10W
R4159	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4160	1-216-097-00	RES,CHIP	100K	5%	1/10W
R4161	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4162	1-216-097-00	RES,CHIP	100K	5%	1/10W
R4163	1-216-091-00	RES,CHIP	56K	5%	1/10W
R4164	1-216-073-00	RES,CHIP	10K	5%	1/10W
R4165	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R4166	1-216-097-00	RES,CHIP	100K	5%	1/10W
R4167	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R4168	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R4169	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R4170	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R4171	1-216-636-11	METAL CHIP	240	0.50%	1/10W
R4173	1-216-075-00	RES,CHIP	12K	5%	1/10W
R4174	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R4175	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4178	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R4179	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R4180	1-216-043-91	RES,CHIP	560	5%	1/10W
R4181	1-216-045-00	RES,CHIP	680	5%	1/10W
R4182	1-216-636-11	METAL CHIP	240	0.50%	1/10W
R4186	1-216-664-11	METAL CHIP	3.6K	0.50%	1/10W
R4187	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R4188	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R4189	1-216-079-00	RES,CHIP	18K	5%	1/10W
R4190	1-216-075-00	RES,CHIP	12K	5%	1/10W
R4191	1-216-075-00	RES,CHIP	12K	5%	1/10W
R4192	1-216-073-00	RES,CHIP	10K	5%	1/10W
R4193	1-216-077-00	RES,CHIP	15K	5%	1/10W
R4194	1-216-045-00	RES,CHIP	680	5%	1/10W
R4195	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R4196	1-216-085-00	RES,CHIP	33K	5%	1/10W
R4197	1-216-673-11	METAL CHIP	8.2K	0.50%	1/10W
R4198	1-216-033-00	RES,CHIP	220	5%	1/10W
R4201	1-216-037-00	RES,CHIP	330	5%	1/10W
R4202	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R4203	1-216-045-00	RES,CHIP	680	5%	1/10W
R4204	1-216-073-00	RES,CHIP	10K	5%	1/10W
R4206	1-216-113-00	RES,CHIP	470K	5%	1/10W
R4207	1-216-025-00	RES,CHIP	100	5%	1/10W
R4208	1-216-133-00	RES,CHIP	3.3M	5%	1/10W
R4209	1-216-033-00	RES,CHIP	220	5%	1/10W
R4210	1-216-033-00	RES,CHIP	220	5%	1/10W
R4211	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R4212	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4213	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4214	1-216-057-00	RES,CHIP	2.2K	5%	1/10W

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REF. NO.	PART NO.	DESCRIPTION			REMARK
R4215	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4216	1-216-097-00	RES,CHIP	100K	5%	1/10W
R4217	1-216-105-00	RES,CHIP	220K	5%	1/10W
R4218	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4219	1-216-073-00	RES,CHIP	10K	5%	1/10W
R4220	1-216-648-11	METAL CHIP	750	0.50%	1/10W
R4221	1-216-636-11	METAL CHIP	240	0.50%	1/10W
R4222	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R4223	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R4224	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R4225	1-216-626-11	METAL CHIP	91	0.50%	1/10W
R4226	1-216-650-11	METAL CHIP	910	0.50%	1/10W
R4227	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R4228	1-216-681-11	METAL CHIP	18K	0.50%	1/10W
R4229	1-216-025-00	RES,CHIP	100	5%	1/10W
R4230	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4231	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R4232	1-216-085-00	RES,CHIP	33K	5%	1/10W
R4233	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4234	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R4235	1-216-081-00	RES,CHIP	22K	5%	1/10W
R4236	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R4237	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R4238	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4239	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R4240	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4241	1-216-083-00	RES,CHIP	27K	5%	1/10W
R4242	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4243	1-216-073-00	RES,CHIP	10K	5%	1/10W
R4244	1-216-073-00	RES,CHIP	10K	5%	1/10W
R4245	1-216-081-00	RES,CHIP	22K	5%	1/10W
R4246	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R4247	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R4248	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R4249	1-216-073-00	RES,CHIP	10K	5%	1/10W
R4250	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R4251	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R4252	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R4253	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R4254	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4255	1-216-091-00	RES,CHIP	56K	5%	1/10W
R4256	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R4257	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R4259	1-216-660-11	METAL CHIP	2.4K	0.50%	1/10W
R4260	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R4261	1-216-033-00	RES,CHIP	220	5%	1/10W
R4262	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R4263	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R4265	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R4267	1-216-037-00	RES,CHIP	330	5%	1/10W
R4268	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4269	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4270	1-216-037-00	RES,CHIP	330	5%	1/10W
R4271	1-216-045-00	RES,CHIP	680	5%	1/10W
R4272	1-216-637-11	METAL CHIP	270	0.50%	1/10W
R4273	1-216-637-11	METAL CHIP	270	0.50%	1/10W
R4274	1-216-637-11	METAL CHIP	270	0.50%	1/10W
R4275	1-216-627-11	METAL CHIP	100	0.50%	1/10W
R4276	1-216-627-11	METAL CHIP	100	0.50%	1/10W
R4277	1-216-627-11	METAL CHIP	100	0.50%	1/10W
R4278	1-216-025-00	RES,CHIP	100	5%	1/10W
R4279	1-216-041-00	RES,CHIP	470	5%	1/10W
R4280	1-216-653-11	METAL CHIP	1.2K	0.50%	1/10W
R4281	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W
R4282	1-216-025-00	RES,CHIP	100	5%	1/10W
R4283	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R4284	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R4285	1-216-041-00	RES,CHIP	470	5%	1/10W
R4286	1-216-073-00	RES,CHIP	10K	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R4287	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4288	1-216-041-00	RES,CHIP	470	5%	1/10W
R4289	1-216-073-00	RES,CHIP	10K	5%	1/10W
R4290	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R4291	1-216-041-00	RES,CHIP	470	5%	1/10W
R4292	1-216-666-11	METAL CHIP	4.3K	0.50%	1/10W
R4293	1-216-645-11	METAL CHIP	560	0.50%	1/10W
R4294	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R4295	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R4296	1-216-666-11	METAL CHIP	4.3K	0.50%	1/10W
R4297	1-216-645-11	METAL CHIP	560	0.50%	1/10W
R4298	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R4299	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R4300	1-216-041-00	RES,CHIP	470	5%	1/10W
R4301	1-216-666-11	METAL CHIP	4.3K	0.50%	1/10W
R4302	1-216-645-11	METAL CHIP	560	0.50%	1/10W
R4303	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R4304	1-216-041-00	RES,CHIP	470	5%	1/10W
R4305	1-216-073-00	RES,CHIP	10K	5%	1/10W
R4306	1-216-089-00	RES,CHIP	47K	5%	1/10W
R4307	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R4308	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R4309	1-216-113-00	RES,CHIP	470K	5%	1/10W
R4313	1-216-073-00	RES,CHIP	10K	5%	1/10W
R4314	1-216-085-00	RES,CHIP	33K	5%	1/10W
R4315	1-216-073-00	RES,CHIP	10K	5%	1/10W
R4316	1-216-073-00	RES,CHIP	10K	5%	1/10W
R4318	1-216-073-00	RES,CHIP	10K	5%	1/10W
R4319	1-216-081-00	RES,CHIP	22K	5%	1/10W
R4320	1-216-025-00	RES,CHIP	100	5%	1/10W
R4321	1-216-025-00	RES,CHIP	100	5%	1/10W
R4323	1-216-073-00	RES,CHIP	10K	5%	1/10W
R4324	1-216-073-00	RES,CHIP	10K	5%	1/10W
R4325	1-216-073-00	RES,CHIP	10K	5%	1/10W
R4326	1-216-295-00	SHORT	0		
R4327	1-216-295-00	SHORT	0		
R4328	1-216-295-00	SHORT	0		
R4329	1-216-295-00	SHORT	0		
R4330	1-216-295-00	SHORT	0		
R4331	1-216-295-00	SHORT	0		
R4332	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4333	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4334	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4335	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R4336	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R4337	1-216-075-00	RES,CHIP	12K	5%	1/10W
R4338	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4339	1-216-001-00	RES,CHIP	10	5%	1/10W
R4340	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4341	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4342	1-216-001-00	RES,CHIP	10	5%	1/10W
R4343	1-216-077-00	RES,CHIP	15K	5%	1/10W
R4344	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4345	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R4346	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R4347	1-216-075-00	RES,CHIP	12K	5%	1/10W
R4348	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4349	1-216-001-00	RES,CHIP	10	5%	1/10W
R4350	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4351	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4352	1-216-001-00	RES,CHIP	10	5%	1/10W
R4353	1-216-077-00	RES,CHIP	15K	5%	1/10W
R4354	1-216-049-00	RES,CHIP	1K	5%	1/10W
R4355	1-216-113-00	RES,CHIP	470K	5%	1/10W
R4357	1-216-073-00	RES,CHIP	10K	5%	1/10W
R4358	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R4359	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R4360	1-216-653-11	METAL CHIP	1.2K	0.50%	1/10W

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

B1 F2 F1

REF. NO.	PART NO.	DESCRIPTION			REMARK
R4361	1-216-653-11	METAL CHIP	1.2K	0.50% 1/10W	
R4362	1-216-655-11	METAL CHIP	1.5K	0.50% 1/10W	
R4363	1-216-049-00	RES,CHIP	1K	5% 1/10W	
R4364	1-216-049-00	RES,CHIP	1K	5% 1/10W	
R4366	1-216-295-00	SHORT	0		
R4368	1-216-295-00	SHORT	0		
R4370	1-216-025-00	RES,CHIP	100	5% 1/10W	
R4371	1-216-025-00	RES,CHIP	100	5% 1/10W	
R4373	1-216-295-00	SHORT	0		
R4375	1-216-295-00	SHORT	0		
R4376	1-216-057-00	RES,CHIP	2.2K	5% 1/10W	
R4377	1-216-065-00	RES,CHIP	4.7K	5% 1/10W	
		<VARIABLE RESISTOR>			
RV4002	1-241-393-21	RES, ADJ, METAL GLAZE 2.2K			
		<CRYSTAL>			
X4001	1-760-895-21	VIBRATOR, CERAMIC			
X4002	1-760-457-11	VIBRATOR, CRYSTAL (VCO)			
X4003	1-527-722-00	VIBRATOR, CRYSTAL			
X4004	1-760-457-11	VIBRATOR, CRYSTAL (VCO)			
X4005	1-527-722-00	VIBRATOR, CRYSTAL			
X4006	1-760-895-21	VIBRATOR, CERAMIC			

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* A-1241-255-A F2 BOARD, COMPLETE
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		<CAPACITOR>				
C651	⚠ 1-136-519-12	FILM	0.47MF	20%	300V	
C652	⚠ 1-136-518-12	FILM	0.33MF	20%	300V	
C653	1-107-670-11	ELECT	10MF	20%	400V	
C655	1-126-967-11	ELECT	47MF	20%	50V	
C657	1-126-968-11	ELECT	100MF	20%	50V	
C658	1-126-951-11	ELECT	470MF	20%	35V	
C659	1-104-665-11	ELECT	100MF	20%	25V	
C660	1-104-664-11	ELECT	47MF	20%	25V	
C661	1-104-664-11	ELECT	47MF	20%	25V	
C662	⚠ 1-113-893-51	CERAMIC	0.0047MF	20%	250V	
C663	⚠ 1-113-924-51	CERAMIC	0.0047MF	20%	250V	
C664	⚠ 1-113-893-51	CERAMIC	0.0047MF	20%	250V	
C665	⚠ 1-113-924-51	CERAMIC	0.0047MF	20%	250V	
C667	1-164-644-11	CERAMIC	330PF	10%	500V	
C668	1-164-644-11	CERAMIC	330PF	10%	500V	
		<CONNECTOR>				
CN6501	* 1-691-291-11	PIN, CONNECTOR (PC BOARD) 5P				
CN6503	* 1-564-506-11	PLUG, CONNECTOR 3P				
CN6504	* 1-580-843-11	PIN, CONNECTOR (POWER)				
CN6505	* 1-691-960-11	PIN, CONNECTOR (PC BOARD) 3P				
CN6506	* 1-564-508-11	PLUG, CONNECTOR 5P				
CN6507	* 1-564-506-11	PLUG, CONNECTOR 3P				
CN6509	1-695-915-11	TAB (CONTACT)				
CN6510	* 1-564-506-11	PLUG, CONNECTOR 3P				
		<DIODE>				
D652	⚠ 8-719-510-35	DIODE D2SBA60F				
D653	8-719-979-64	DIODE UF4005PKG23				
D654	8-719-059-23	DIODE P6KE200AG23				
D655	8-719-979-58	DIODE EGP10D				
D656	8-719-979-58	DIODE EGP10D				
D657	8-719-921-88	DIODE MTZJ-13B				
D658	8-719-510-64	DIODE S2LA20F				
D659	8-719-911-19	DIODE 1SS119-25				
D660	8-719-302-43	DIODE EL1Z				
D661	8-719-302-43	DIODE EL1Z				
		<FUSE>				
F651	⚠ 1-532-504-41	FUSE 4A/250V				
	1-533-230-11	HOLDER, FUSE ; F651				
		<IC>				
IC651	8-759-426-45	IC PWR-TOP210PFI				
		<COIL>				
L652	1-412-549-31	INDUCTOR 1mH				
L653	1-412-549-31	INDUCTOR 1mH				
		<FILTER>				
LF651	⚠ 1-424-436-11	TRANSFORMER, LINE FILTER				
LF652	⚠ 1-424-436-11	TRANSFORMER, LINE FILTER				
		<TRANSISTOR>				
Q651	8-729-034-00	TRANSISTOR 2SA1282ATP-EF				
Q652	8-729-029-66	TRANSISTOR DTC114ESA				
		<RESISTOR>				
R651	⚠ 1-244-945-91	CARBON	1M	5%	1/2W	
R652	⚠ 1-202-961-11	CEMENTED	1.8	5%	10W	
R653	⚠ 1-202-961-11	CEMENTED	1.8	5%	10W	
R654	1-211-771-11	FUSIBLE	4.7	5%	1/4W	F
R656	1-247-791-91	CARBON	22	5%	1/4W	
R659	1-249-421-11	CARBON	2.2K	5%	1/4W	
R662	⚠ 1-218-265-21	METAL	8.2M	5%	1W	
		<RELAY>				
RY651	⚠ 1-755-018-11	RELAY				
		<TRANSFORMER>				
T651	⚠ 1-429-808-21	TRANSFORMER, CONVERTER				

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* A-1241-256-A F1 BOARD, COMPLETE
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		<CONNECTOR>				
CN8031	* 1-564-518-11	PLUG, CONNECTOR 3P				
		<SWITCH>				
S8031	⚠ 1-570-826-11	SWITCH, PUSH (1 KEY)				

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REF. NO.	PART NO.	DESCRIPTION				REMARK
	* A-1297-874-A	A BOARD, COMPLETE				
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	4-202-373-01	SPRING, IC				
	4-382-854-11	SCREW (M3X10), P, SW (+)				
		<CAPACITOR>				
C1001	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C1002	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C1005	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C1006	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C1007	1-163-038-00	CERAMIC CHIP	0.1MF		25V	
C1008	1-104-664-11	ELECT	47MF	20%	16V	
C1009	1-104-664-11	ELECT	47MF	20%	16V	
C1010	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C1011	1-126-961-11	ELECT	2.2MF	20%	50V	
C1012	1-126-961-11	ELECT	2.2MF	20%	50V	
C1013	1-126-961-11	ELECT	2.2MF	20%	50V	
C1014	1-126-965-11	ELECT	22MF	20%	50V	
C1015	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C1016	1-126-934-11	ELECT	220MF	20%	10V	
C1020	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C1022	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C1023	1-104-664-11	ELECT	47MF	20%	16V	
C1024	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C1026	1-126-961-11	ELECT	2.2MF	20%	50V	
C1028	1-126-961-11	ELECT	2.2MF	20%	50V	
C1029	1-163-023-00	CERAMIC CHIP	0.015MF	10%	50V	
C1030	1-104-664-11	ELECT	47MF	20%	16V	
C1031	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V	
C1032	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C1033	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C1034	1-104-664-11	ELECT	47MF	20%	16V	
C1035	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C1036	1-126-934-11	ELECT	220MF	20%	16V	
C1038	1-104-664-11	ELECT	47MF	20%	16V	
C1039	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C1040	1-104-664-11	ELECT	47MF	20%	16V	
C1041	1-104-664-11	ELECT	47MF	20%	16V	
C1042	1-104-664-11	ELECT	47MF	20%	16V	
C1043	1-104-664-11	ELECT	47MF	20%	16V	
C1044	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C1045	1-126-934-11	ELECT	220MF	20%	10V	
C1046	1-104-664-11	ELECT	47MF	20%	16V	
C1047	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C1048	1-104-664-11	ELECT	47MF	20%	16V	
C1052	1-104-664-11	ELECT	47MF	20%	16V	
C1053	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V	
C1054	1-104-664-11	ELECT	47MF	20%	16V	
C1055	1-126-964-11	ELECT	10MF	20%	50V	
C1056	1-163-038-00	CERAMIC CHIP	0.1MF		25V	
C1057	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V	
C1058	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V	
C1059	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V	
C1060	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V	
C1061	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V	
C1062	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V	
C1066	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V	
C1069	1-126-964-11	ELECT	10MF	20%	50V	
C1070	1-126-964-11	ELECT	10MF	20%	50V	
C1071	1-126-964-11	ELECT	10MF	20%	50V	
C1072	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C1074	1-163-237-11	CERAMIC CHIP	27PF	5%	50V	
C1075	1-163-245-11	CERAMIC CHIP	56PF	5%	50V	
C1076	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C1078	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V	
C1079	1-164-346-11	CERAMIC CHIP	1MF		16V	
C1080	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V	
C1081	1-164-346-11	CERAMIC CHIP	1MF		16V	
C1083	1-164-222-11	CERAMIC CHIP	0.22MF		25V	
C1084	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C1085	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C1087	1-104-664-11	ELECT	47MF	20%	16V	
C1088	1-104-664-11	ELECT	47MF	20%	16V	
C1089	1-104-664-11	ELECT	47MF	20%	16V	
C1090	1-104-664-11	ELECT	47MF	20%	16V	
C1091	1-126-960-11	ELECT	1MF	20%	50V	
C1092	1-164-005-11	CERAMIC CHIP	0.47MF		25V	
C1093	1-126-960-11	ELECT	1MF	20%	50V	
C1094	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C1095	1-164-005-11	CERAMIC CHIP	0.47MF		25V	
C1096	1-164-005-11	CERAMIC CHIP	0.47MF		25V	
C1097	1-164-005-11	CERAMIC CHIP	0.47MF		25V	
C1098	1-126-934-11	ELECT	220MF	20%	16V	
C1101	1-163-131-00	CERAMIC CHIP	390PF	5%	50V	
C1102	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V	
C1104	1-126-964-11	ELECT	10MF	20%	50V	
C1105	1-126-964-11	ELECT	10MF	20%	50V	
C1106	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C1107	1-104-664-11	ELECT	47MF	20%	16V	
C1108	1-126-964-11	ELECT	10MF	20%	50V	
C1110	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V	
C1111	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V	
C1112	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V	
C1113	1-163-137-00	CERAMIC CHIP	680PF	5%	50V	
C1114	1-104-664-11	ELECT	47MF	20%	16V	
C1115	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V	
C1116	1-104-664-11	ELECT	47MF	20%	16V	
C1117	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C1118	1-104-664-11	ELECT	47MF	20%	16V	
C1119	1-104-664-11	ELECT	47MF	20%	16V	
C1120	1-163-137-00	CERAMIC CHIP	680PF	5%	50V	
C1121	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V	
C1122	1-104-664-11	ELECT	47MF	20%	16V	
C1123	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C1124	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C1125	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V	
C1126	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C1127	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C1128	1-163-037-11	CERAMIC CHIP	0.022MF	10%	50V	
C1129	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V	
C1130	1-126-960-11	ELECT	1MF	20%	50V	
C1131	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C1132	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C1133	1-104-664-11	ELECT	47MF	20%	16V	
C1134	1-126-964-11	ELECT	10MF	20%	50V	
C1135	1-163-259-91	CERAMIC CHIP	220PF	5%	50V	
C1136	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C1137	1-163-229-11	CERAMIC CHIP	12PF	5%	50V	
C1142	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V	
C1143	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	
C1147	1-104-664-11	ELECT	47MF	20%	16V	
C1148	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V	
C1150	1-163-038-00	CERAMIC CHIP	0.1MF		25V	
C1151	1-163-038-00	CERAMIC CHIP	0.1MF		25V	
C1152	1-104-664-11	ELECT	47MF	20%	16V	
C1157	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	
C1158	1-104-664-11	ELECT	47MF	20%	16V	
C1159	1-104-664-11	ELECT	47MF	20%	16V	
C1162	1-104-664-11	ELECT	47MF	20%	16V	
C1163	1-104-664-11	ELECT	47MF	20%	16V	
C1164	1-104-664-11	ELECT	47MF	20%	16V	
C1165	1-104-664-11	ELECT	47MF	20%	16V	
C1166	1-104-664-11	ELECT	47MF	20%	16V	
C1167	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C1168	1-126-961-11	ELECT	2.2MF	20%	50V	
C1169	1-126-965-11	ELECT	22MF	20%	50V	

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REF. NO.	PART NO.	DESCRIPTION			REMARK
C1170	1-126-960-11	ELECT	1MF	20%	50V
C1171	1-136-165-00	FILM	0.1MF	5%	50V
C1172	1-124-699-11	ELECT	220MF	20%	25V
C1173	1-124-699-11	ELECT	220MF	20%	25V
C1174	1-136-165-00	FILM	0.1MF	5%	50V
C1175	1-104-664-11	ELECT	47MF	20%	16V
C1176	1-126-943-11	ELECT	2200MF	20%	25V
C1177	1-126-943-11	ELECT	2200MF	20%	25V
C1178	1-126-041-11	ELECT	2200MF	20%	35V
C1179	1-126-961-11	ELECT	2.2MF	20%	50V
C1180	1-136-165-00	FILM	0.1MF	5%	50V
C1181	1-104-664-11	ELECT	47MF	20%	16V
C1182	1-104-664-11	ELECT	47MF	20%	16V
C1183	1-126-960-11	ELECT	1MF	20%	50V
C1184	1-126-965-11	ELECT	22MF	20%	50V
C1185	1-104-664-11	ELECT	47MF	20%	16V
C1186	1-104-664-11	ELECT	47MF	20%	16V
C1187	1-137-371-11	FILM	0.015MF	5%	50V
C1188	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C1189	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C1190	1-104-664-11	ELECT	47MF	20%	16V
C1191	1-137-371-11	FILM	0.015MF	5%	50V
C1192	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C1193	1-104-664-11	ELECT	47MF	20%	16V
C1194	1-137-372-11	FILM	0.022MF	5%	50V
C1195	1-126-961-11	ELECT	2.2MF	20%	50V
C1196	1-126-961-11	ELECT	2.2MF	20%	50V
C1197	1-137-372-11	FILM	0.022MF	5%	50V
C1198	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C1199	1-104-664-11	ELECT	47MF	20%	16V
C1200	1-136-165-00	FILM	0.1MF	5%	50V
C1201	1-163-037-11	CERAMIC CHIP	0.022MF	10%	50V
C1202	1-163-037-11	CERAMIC CHIP	0.022MF	10%	50V
C1203	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C1204	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C1205	1-126-964-11	ELECT	10MF	20%	50V
C1206	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C1207	1-137-613-11	FILM	0.0018MF	2%	100V
C1208	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C1209	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C1210	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C1211	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C1212	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C1213	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C1214	1-104-664-11	ELECT	47MF	20%	16V
C1215	1-104-664-11	ELECT	47MF	20%	16V
C1216	1-163-019-00	CERAMIC CHIP	0.0068MF	10%	50V
C1217	1-163-019-00	CERAMIC CHIP	0.0068MF	10%	50V
C1218	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C1219	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C1222	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C1223	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C1224	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C1225	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C1226	1-163-011-11	CERAMIC CHIP	0.0015MF	10%	50V
C1227	1-163-011-11	CERAMIC CHIP	0.0015MF	10%	50V
C1228	1-126-961-11	ELECT	2.2MF	20%	50V
C1229	1-126-961-11	ELECT	2.2MF	20%	50V
C1230	1-136-177-00	FILM	1MF	5%	50V
C1231	1-136-177-00	FILM	1MF	5%	50V
C1232	1-164-182-11	CERAMIC CHIP	0.0033MF	10%	50V
C1233	1-163-007-11	CERAMIC CHIP	680PF	10%	50V
C1234	1-126-964-11	ELECT	10MF	20%	50V
C1236	1-164-348-11	CERAMIC CHIP	0.12MF	10%	25V
C1237	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1238	1-163-986-00	CERAMIC CHIP	0.027MF	10%	25V
C1239	1-163-986-00	CERAMIC CHIP	0.027MF	10%	25V
C1240	1-163-022-00	CERAMIC CHIP	0.012MF	10%	50V
C1241	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1242	1-163-014-00	CERAMIC CHIP	0.0027MF	5%	50V
C1243	1-163-014-00	CERAMIC CHIP	0.0027MF	5%	50V
C1244	1-163-010-11	CERAMIC CHIP	0.0012MF	10%	50V
C1245	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C1246	1-126-965-11	ELECT	22MF	20%	50V
C1247	1-126-933-11	ELECT	100MF	20%	16V
C1248	1-164-348-11	CERAMIC CHIP	0.12MF	10%	25V
C1249	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1250	1-163-986-00	CERAMIC CHIP	0.027MF	10%	25V
C1251	1-163-986-00	CERAMIC CHIP	0.027MF	10%	25V
C1252	1-163-022-00	CERAMIC CHIP	0.012MF	10%	50V
C1253	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1254	1-163-014-00	CERAMIC CHIP	0.0027MF	5%	50V
C1255	1-163-014-00	CERAMIC CHIP	0.0027MF	5%	50V
C1256	1-163-010-11	CERAMIC CHIP	0.0012MF	10%	50V
C1257	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C1258	1-136-165-00	FILM	0.1MF	5%	50V
C1259	1-126-964-11	ELECT	10MF	20%	50V
C1260	1-137-372-11	FILM	0.022MF	5%	50V
C1261	1-137-372-11	FILM	0.022MF	5%	50V
C1262	1-137-371-11	FILM	0.015MF	5%	50V
C1263	1-130-489-00	FILM	0.033MF	5%	50V
C1264	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1265	1-126-767-11	ELECT	1000MF	20%	16V
C1266	1-126-933-11	ELECT	100MF	20%	16V
C1267	1-126-964-11	ELECT	10MF	20%	50V
C1268	1-126-933-11	ELECT	100MF	20%	16V
C1269	1-126-964-11	ELECT	10MF	20%	50V
C1270	1-126-964-11	ELECT	10MF	20%	50V
C1271	1-136-165-00	FILM	0.1MF	5%	50V
C1272	1-126-964-11	ELECT	10MF	20%	50V
C1273	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C1274	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C1278	1-126-964-11	ELECT	10MF	20%	50V
C1279	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1280	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C1281	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C1282	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C1283	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C1284	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1285	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C1286	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1287	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1288	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1289	1-126-964-11	ELECT	10MF	20%	50V
C1290	1-126-964-11	ELECT	10MF	20%	50V
C1291	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1306	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C1307	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C1311	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1312	1-104-664-11	ELECT	47MF	20%	16V
C1313	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C1314	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1315	1-104-664-11	ELECT	47MF	20%	16V
C1316	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C1317	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C1319	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1320	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1321	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1322	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C1323	1-126-964-11	ELECT	10MF	20%	50V
C1324	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1325	1-126-933-11	ELECT	100MF	20%	16V
C1326	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1328	1-126-964-11	ELECT	10MF	20%	50V
C1329	1-126-960-11	ELECT	1MF	20%	50V
C1330	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1331	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V

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REF. NO.	PART NO.	DESCRIPTION			REMARK
C1332	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1333	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1334	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1335	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1336	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1337	1-126-934-11	ELECT	220MF	20%	10V
C1338	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1339	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1340	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C1341	1-126-959-11	ELECT	0.47MF	20%	50V
C1342	1-164-346-11	CERAMIC CHIP	1MF		16V
C1343	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1344	1-126-961-11	ELECT	2.2MF	20%	50V
C1345	1-126-965-11	ELECT	22MF	20%	50V
C1346	1-164-222-11	CERAMIC CHIP	0.22MF		25V
C1347	1-164-222-11	CERAMIC CHIP	0.22MF		25V
C1352	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C1353	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C1355	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C1356	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C1358	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C1359	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C1363	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C1365	1-126-965-11	ELECT	22MF	20%	50V
C1367	1-126-933-11	ELECT	100MF	20%	16V
C1368	1-164-346-11	CERAMIC CHIP	1MF		16V
C1369	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1372	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C1373	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C1375	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C1376	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C1377	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1378	1-164-346-11	CERAMIC CHIP	1MF		16V
C1382	1-164-346-11	CERAMIC CHIP	1MF		16V
C1384	1-164-346-11	CERAMIC CHIP	1MF		16V
C1385	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C1387	1-164-222-11	CERAMIC CHIP	0.22MF		25V
C1389	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C1390	1-126-934-11	ELECT	220MF	20%	10V
C1391	1-126-965-11	ELECT	22MF	20%	50V
C1392	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C1394	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C1397	1-126-767-11	ELECT	1000MF	20%	16V
C1398	1-104-664-11	ELECT	47MF	20%	16V
C1399	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1402	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C1403	1-126-964-11	ELECT	10MF	20%	50V
C1407	1-107-701-11	ELECT	47MF	20%	16V
C1408	1-126-933-11	ELECT	100MF	20%	16V
C1409	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1410	1-164-346-11	CERAMIC CHIP	1MF		16V
C1411	1-163-078-11	CERAMIC CHIP	0.033MF	10%	25V
C1412	1-165-321-11	CERAMIC CHIP	0.68MF	10%	16V
C1415	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1416	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1417	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1420	1-164-346-11	CERAMIC CHIP	1MF		16V
C1421	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1422	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1423	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1424	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C1427	1-164-695-11	CERAMIC CHIP	0.0022MF	5%	50V
C1428	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1430	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1431	1-126-963-11	ELECT	4.7MF	20%	50V
C1432	1-126-961-11	ELECT	2.2MF	20%	50V
C1433	1-126-961-11	ELECT	2.2MF	20%	50V
C1434	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V

REF. NO.	PART NO.	DESCRIPTION			REMARK
C1439	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1440	1-126-965-11	ELECT	22MF	20%	50V
C1441	1-126-965-11	ELECT	22MF	20%	50V
C1442	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C1443	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C1444	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C1445	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C1448	1-126-964-11	ELECT	10MF	20%	50V

<OSCILLATOR>

CD1001	1-527-992-31	OSCILLATOR, CERAMIC

<FILTER>

CF1001	1-760-416-21	FILTER, CERAMIC
CF1002	1-760-449-11	FILTER, CERAMIC
CF1003	1-760-571-21	FILTER, CERAMIC
CF1004	1-760-415-21	FILTER, CERAMIC
CF1005	1-760-450-21	FILTER, CERAMIC
CF1006	1-760-571-21	FILTER, CERAMIC
CF1007	1-760-415-21	FILTER, CERAMIC
CF1008	1-760-450-21	FILTER, CERAMIC

<CONNECTOR>

CN002	1-695-915-11	TAB (CONTACT)
CN0806	1-695-298-11	CONNECTOR, BOARD TO BOARD 40P
CN1001	* 1-564-505-11	PLUG, CONNECTOR 2P
CN1002	* 1-564-520-11	PLUG, CONNECTOR 5P
CN1003	* 1-564-513-11	PLUG, CONNECTOR 10P
CN1004	* 1-564-508-11	PLUG, CONNECTOR 5P
CN1008	* 1-564-506-11	PLUG, CONNECTOR 3P
CN1009	* 1-564-510-11	PLUG, CONNECTOR 7P
CN1019	1-695-298-11	CONNECTOR, BOARD TO BOARD 40P
CN1021	* 1-564-509-11	PLUG, CONNECTOR 6P
CN1023	* 1-564-506-11	PLUG, CONNECTOR 3P
CN1024	* 1-564-507-11	PLUG, CONNECTOR 4P
CN1025	* 1-564-506-11	PLUG, CONNECTOR 3P
CN1031	* 1-564-510-11	PLUG, CONNECTOR 7P
CN1032	* 1-564-512-11	PLUG, CONNECTOR 9P
CN1301	* 1-564-513-11	PLUG, CONNECTOR 10P
CN1302	* 1-564-512-11	PLUG, CONNECTOR 9P
CN1303	* 1-564-506-11	PLUG, CONNECTOR 3P
CN4002	1-695-298-11	CONNECTOR, BOARD TO BOARD 40P

<DIODE>

D1001	8-719-914-43	DIODE DAN202K
D1002	8-719-914-42	DIODE DA204K
D1003	8-719-914-44	DIODE DAP202K
D1004	8-719-982-27	DIODE MTZJ-33C
D1007	8-719-110-72	DIODE RD30ESB2
D1008	8-719-110-72	DIODE RD30ESB2
D1009	8-719-914-43	DIODE DAN202K
D1010	8-719-914-43	DIODE DAN202K
D1011	8-719-914-43	DIODE DAN202K
D1012	8-719-404-49	DIODE MA111
D1013	8-719-801-78	DIODE 1SS184
D1014	8-719-914-43	DIODE DAN202K
D1015	8-719-914-43	DIODE DAN202K
D1018	8-719-914-44	DIODE DAP202K
D1019	8-719-914-43	DIODE DAN202K
D1020	8-719-914-44	DIODE DAP202K
D1021	8-719-109-89	DIODE RD5.6ESB2
D1022	8-719-109-89	DIODE RD5.6ESB2
D1024	8-719-036-58	DIODE MA3030-H(TX)
D1026	8-719-914-43	DIODE DAN202K
D1027	8-719-914-42	DIODE DA204K

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

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REF. NO.	PART NO.	DESCRIPTION			REMARK
D1028	8-719-914-44	DIODE DAP202K			
D1029	8-719-041-97	DIODE MA113-(TX)			
D1101	8-719-914-43	DIODE DAN202K			
D1102	8-719-820-71	DIODE 1SV214			
D1103	8-719-914-43	DIODE DAN202K			
D1104	8-719-914-43	DIODE DAN202K			
D1105	8-719-914-43	DIODE DAN202K			
D1106	8-719-914-43	DIODE DAN202K			
		<FERRITE BEAD>			
FB1001	1-216-296-00	SHORT	0		
FB1002	1-216-296-00	SHORT	0		
FB1003	1-216-134-00	RES,CHIP	2.2	5% 1/8W	
FB1004	1-216-296-00	SHORT	0		
FB1005	1-216-296-00	SHORT	0		
FB1006	1-543-813-21	FERRITE	0UH		
FB1007	1-543-813-21	FERRITE	0UH		
FB1008	1-543-813-21	FERRITE	0UH		
FB1009	1-216-296-00	SHORT	0		
FB1010	1-543-813-21	FERRITE	0UH		
FB1011	1-543-813-21	FERRITE	0UH		
FB1012	1-543-813-21	FERRITE	0UH		
		<FILTER>			
FL1004	1-408-603-31	INDUCTOR 10UH			
FL1005	1-408-603-31	INDUCTOR 10UH			
FL1006	1-408-607-31	INDUCTOR 22UH			
FL1007	1-236-071-11	ENCAPSULATED COMPONENT			
FL1008	1-216-158-00	RES,CHIP	22	5% 1/8W	
		<IC>			
IC1001	8-752-854-32	IC CXP85220A-039Q			
IC1003	8-759-514-57	IC BA7046F			
IC1004	8-759-520-85	IC TDA9820T-T			
IC1005	8-759-520-85	IC TDA9820T-T			
IC1006	8-759-710-86	IC NJM2233BM			
IC1007	8-759-457-41	IC KA76L05ZTA			
IC1009	8-759-710-86	IC NJM2233BM			
IC1010	8-752-067-36	IC CXA1815S			
IC1012	8-752-072-94	IC CXA1875AM-T4			
IC1013	8-759-251-58	IC SAA7283GP			
IC1014	8-759-085-51	IC NJM2284M			
IC1015	8-759-348-87	IC TDA6812-2MGEG			
IC1017	8-759-909-71	IC BA4558F			
IC1018	8-759-257-64	IC TDA7317			
IC1019	8-759-442-44	IC SDA30C164-2-GEG			
IC1020	8-759-452-22	IC SDA5273P-C134-GEG			
IC1021	1-750-797-11	SOCKET, PLCC			
IC1021	8-759-566-29	IC TMS27PC20-15FMLLE113			
IC1022	8-759-488-63	IC MSM514256C-60ZS			
IC1023	8-759-432-34	IC ST24W16FM6TR			
IC1024	8-759-248-91	IC SDA9086-5			
IC1025	8-759-502-21	IC TDA2822M			
IC1026	8-759-909-71	IC BA4558F			
IC1027	8-759-909-71	IC BA4558F			
IC1028	8-759-980-43	IC TDA2009A			
IC1029	8-759-980-43	IC TDA2009A			
IC1030	8-752-072-88	IC CXA2011Q			
IC1031	8-752-058-68	IC CXA1315M			
IC1032	8-752-070-54	IC CXA1839Q-T6			
IC1033	8-759-701-59	IC NJM78M09FA			
IC1035	8-759-513-71	IC PQ05RF21			
IC1036	8-759-908-15	IC TL431CLP			
IC1041	8-759-259-18	IC MB3793-42PNF			
IC1042	8-759-034-48	IC MC74F02M-T2			
IC1043	8-759-054-12	IC PQ09RA1			

REF. NO.	PART NO.	DESCRIPTION			REMARK
		<CHIP CONDUCTOR>			
JR1006	1-216-295-00	SHORT	0		
JR1007	1-216-295-00	SHORT	0		
JR1010	1-216-295-00	SHORT	0		
JR1011	1-216-295-00	SHORT	0		
JR1016	1-216-295-00	SHORT	0		
JR1017	1-216-295-00	SHORT	0		
JR1020	1-216-295-00	SHORT	0		
JR1026	1-216-295-00	SHORT	0		
JR1031	1-216-295-00	SHORT	0		
JR1118	1-216-295-00	SHORT	0		
JR1121	1-216-295-00	SHORT	0		
JR1122	1-216-295-00	SHORT	0		
		<COIL>			
L1003	1-410-397-21	FERRITE	1.1UH		
L1004	1-412-757-11	INDUCTOR 68UH			
L1005	1-410-067-21	INDUCTOR 4.7mH			
L1006	1-412-757-11	INDUCTOR 68UH			
L1007	1-410-397-21	FERRITE	1.1UH		
L1008	1-410-397-21	FERRITE	1.1UH		
L1010	1-408-397-00	INDUCTOR 1UH			
L1011	1-412-757-11	INDUCTOR 68UH			
L1012	1-408-603-31	INDUCTOR 10UH			
L1013	1-410-426-11	INDUCTOR 39UH			
L1014	1-410-397-21	FERRITE	1.1UH		
L1016	1-410-431-11	INDUCTOR 100UH			
L1017	1-408-397-00	INDUCTOR 1UH			
L1018	1-408-397-00	INDUCTOR 1UH			
L1019	1-412-751-11	INDUCTOR 18UH			
L1020	1-408-603-31	INDUCTOR 10UH			
L1021	1-410-423-11	INDUCTOR 22UH			
L1022	1-410-423-11	INDUCTOR 22UH			
L1023	1-410-423-11	INDUCTOR 22UH			
L1025	1-410-431-11	INDUCTOR 100UH			
L1026	1-410-397-21	FERRITE	1.1UH		
L1027	1-412-757-11	INDUCTOR 68UH			
L1028	1-410-423-11	INDUCTOR 22UH			
L1029	1-412-751-11	INDUCTOR 18UH			
L1101	1-412-004-31	INDUCTOR CHIP 6.8UH			
L1102	1-412-757-11	INDUCTOR 68UH			
L1104	1-410-431-11	INDUCTOR 100UH			
		<IC LINK>			
PS1001	⚠ 1-532-637-91	LINK, IC (1A/150V)			
PS1002	⚠ 1-532-984-91	LINK, IC (2A/90V)			
PS1003	⚠ 1-532-984-91	LINK, IC (2A/90V)			
		<TRANSISTOR>			
Q1001	1-801-806-11	TRANSISTOR DTC144EKA-T146			
Q1003	8-729-620-06	TRANSISTOR 2SC3052-EF			
Q1004	1-801-806-11	TRANSISTOR DTC144EKA-T146			
Q1005	1-801-806-11	TRANSISTOR DTC144EKA-T146			
Q1007	8-729-620-06	TRANSISTOR 2SC3052-EF			
Q1008	8-729-620-06	TRANSISTOR 2SC3052-EF			
Q1011	8-729-620-06	TRANSISTOR 2SC3052-EF			
Q1012	1-801-806-11	TRANSISTOR DTC144EKA-T146			
Q1013	8-729-620-06	TRANSISTOR 2SC3052-EF			
Q1014	8-729-620-06	TRANSISTOR 2SC3052-EF			
Q1015	8-729-620-06	TRANSISTOR 2SC3052-EF			
Q1016	8-729-216-22	TRANSISTOR 2SA1162-G			
Q1017	8-729-620-06	TRANSISTOR 2SC3052-EF			
Q1018	8-729-216-22	TRANSISTOR 2SA1162-G			
Q1019	8-729-216-22	TRANSISTOR 2SA1162-G			
Q1020	8-729-620-06	TRANSISTOR 2SC3052-EF			

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REF. NO.	PART NO.	DESCRIPTION	REMARK
Q1021	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q1022	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1024	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1025	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1026	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1027	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1028	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1029	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q1030	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q1031	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q1032	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1033	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1034	8-729-021-82	TRANSISTOR 2SD2396K	
Q1035	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q1036	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q1037	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q1038	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q1039	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q1040	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1042	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1043	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1044	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1045	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1047	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q1048	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q1049	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1050	8-729-402-84	TRANSISTOR XN4601	
Q1051	8-729-402-84	TRANSISTOR XN4601	
Q1052	8-729-900-53	TRANSISTOR DTC114EK	
Q1053	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q1059	8-729-027-31	TRANSISTOR DTA124EKA-T146	
Q1060	8-729-901-00	TRANSISTOR DTC124EK	
Q1061	8-729-901-00	TRANSISTOR DTC124EK	
Q1062	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q1064	8-729-901-00	TRANSISTOR DTC124EK	
Q1065	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q1066	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1067	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1068	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1069	8-729-900-53	TRANSISTOR DTC114EK	
Q1070	8-729-901-00	TRANSISTOR DTC124EK	
Q1071	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q1072	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q1076	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1077	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1078	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q1079	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q1105	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q1106	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q1107	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q1108	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q1109	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q1110	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q1112	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q1114	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q1115	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1116	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1117	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q1118	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q1119	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1120	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q1121	8-729-900-53	TRANSISTOR DTC114EK	
Q1122	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q1123	8-729-039-67	TRANSISTOR BSS83	
Q1124	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1125	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q1126	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q1127	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q1128	8-729-620-06	TRANSISTOR 2SC3052-EF	

REF. NO.	PART NO.	DESCRIPTION			REMARK
		<RESISTOR>			
R1001	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1002	1-216-025-00	RES,CHIP	100	5%	1/10W
R1004	1-216-025-00	RES,CHIP	100	5%	1/10W
R1005	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1006	1-216-025-00	RES,CHIP	100	5%	1/10W
R1007	1-216-033-00	RES,CHIP	220	5%	1/10W
R1008	1-216-025-00	RES,CHIP	100	5%	1/10W
R1009	1-216-025-00	RES,CHIP	100	5%	1/10W
R1010	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1011	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1012	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1013	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R1014	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R1015	1-216-043-91	RES,CHIP	560	5%	1/10W
R1016	1-216-295-91	SHORT	0		
R1017	1-216-198-91	RES,CHIP	1K	5%	1/8W
R1018	1-216-198-91	RES,CHIP	1K	5%	1/8W
R1019	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1020	1-216-198-91	RES,CHIP	1K	5%	1/8W
R1021	1-216-295-00	SHORT	0		
R1022	1-216-025-00	RES,CHIP	100	5%	1/10W
R1023	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1024	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1025	1-216-025-00	RES,CHIP	100	5%	1/10W
R1026	1-216-025-00	RES,CHIP	100	5%	1/10W
R1027	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1028	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1029	1-216-025-00	RES,CHIP	100	5%	1/10W
R1030	1-216-041-00	RES,CHIP	470	5%	1/10W
R1034	1-216-043-91	RES,CHIP	560	5%	1/10W
R1035	1-216-043-91	RES,CHIP	560	5%	1/10W
R1036	1-216-043-91	RES,CHIP	560	5%	1/10W
R1037	1-216-295-00	SHORT	0		
R1039	1-216-083-00	RES,CHIP	27K	5%	1/10W
R1040	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R1041	1-216-077-00	RES,CHIP	15K	5%	1/10W
R1042	1-216-689-11	RES,CHIP	39K	5%	1/10W
R1043	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1044	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R1045	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1046	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1048	1-249-417-11	CARBON	1K	5%	1/4W F
R1051	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1052	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R1053	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R1054	1-216-025-00	RES,CHIP	100	5%	1/10W
R1055	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1056	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1057	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R1058	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R1059	1-216-043-91	RES,CHIP	560	5%	1/10W
R1060	1-216-043-91	RES,CHIP	560	5%	1/10W
R1061	1-216-043-91	RES,CHIP	560	5%	1/10W
R1062	1-216-295-00	SHORT	0		
R1063	1-216-083-00	RES,CHIP	27K	5%	1/10W
R1064	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1066	1-216-025-00	RES,CHIP	100	5%	1/10W
R1067	1-216-025-00	RES,CHIP	100	5%	1/10W
R1068	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1070	1-216-043-91	RES,CHIP	560	5%	1/10W
R1071	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1072	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1073	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1074	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1075	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1076	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1077	1-216-113-00	RES,CHIP	470K	5%	1/10W

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REF. NO.	PART NO.	DESCRIPTION			REMARK
R1078	1-216-113-00	RES,CHIP	470K	5%	1/10W
R1079	1-218-755-11	METAL CHIP	130K	0.50%	1/10W
R1080	1-216-113-00	RES,CHIP	470K	5%	1/10W
R1081	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1082	1-216-107-00	RES,CHIP	270K	5%	1/10W
R1084	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R1086	1-216-653-11	METAL CHIP	1.2K	0.50%	1/10W
R1089	1-216-043-91	RES,CHIP	560	5%	1/10W
R1092	1-216-646-11	METAL CHIP	620	0.50%	1/10W
R1094	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R1095	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1096	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1097	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1098	1-216-025-00	RES,CHIP	100	5%	1/10W
R1099	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1100	1-216-037-00	RES,CHIP	330	5%	1/10W
R1101	1-216-025-00	RES,CHIP	100	5%	1/10W
R1102	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1103	1-216-134-00	RES,CHIP	2.2	5%	1/8W
R1104	1-216-085-00	RES,CHIP	33K	5%	1/10W
R1105	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R1106	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1107	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1108	1-208-845-11	RES,CHIP	1M	5%	1/10W
R1109	1-208-845-11	RES,CHIP	1M	5%	1/10W
R1110	1-216-150-91	RES,CHIP	10	5%	1/8W
R1111	1-216-025-00	RES,CHIP	100	5%	1/10W
R1112	1-216-025-00	RES,CHIP	100	5%	1/10W
R1113	1-216-117-00	RES,CHIP	680K	5%	1/10W
R1115	1-216-097-00	RES,CHIP	100K	5%	1/10W
R1116	1-216-089-00	RES,CHIP	47K	5%	1/10W
R1117	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1118	1-216-134-00	RES,CHIP	2.2	5%	1/8W
R1121	1-216-097-00	RES,CHIP	100K	5%	1/10W
R1122	1-216-097-00	RES,CHIP	100K	5%	1/10W
R1123	1-216-103-00	RES,CHIP	180K	5%	1/10W
R1124	1-216-089-00	RES,CHIP	47K	5%	1/10W
R1125	1-216-097-00	RES,CHIP	100K	5%	1/10W
R1126	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1127	1-216-097-00	RES,CHIP	100K	5%	1/10W
R1128	1-216-103-00	RES,CHIP	180K	5%	1/10W
R1129	1-216-119-00	RES,CHIP	820K	5%	1/10W
R1130	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1131	1-216-037-00	RES,CHIP	330	5%	1/10W
R1132	1-216-097-00	RES,CHIP	100K	5%	1/10W
R1133	1-216-089-00	RES,CHIP	47K	5%	1/10W
R1134	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1135	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1138	1-216-043-91	RES,CHIP	560	5%	1/10W
R1139	1-216-037-00	RES,CHIP	330	5%	1/10W
R1140	1-216-037-00	RES,CHIP	330	5%	1/10W
R1141	1-216-025-00	RES,CHIP	100	5%	1/10W
R1144	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1145	1-216-001-00	RES,CHIP	10	5%	1/10W
R1146	1-216-045-00	RES,CHIP	680	5%	1/10W
R1147	1-216-039-00	RES,CHIP	390	5%	1/10W
R1148	1-216-045-00	RES,CHIP	680	5%	1/10W
R1149	1-216-001-00	RES,CHIP	10	5%	1/10W
R1150	1-216-039-00	RES,CHIP	390	5%	1/10W
R1151	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1152	1-216-041-00	RES,CHIP	470	5%	1/10W
R1153	1-216-041-00	RES,CHIP	470	5%	1/10W
R1154	1-216-041-00	RES,CHIP	470	5%	1/10W
R1155	1-216-295-00	SHORT	0		
R1156	1-216-295-00	SHORT	0		
R1157	1-216-295-00	SHORT	0		
R1158	1-249-419-11	CARBON	1.5K	5%	1/4W
R1159	1-247-807-31	CARBON	100	5%	1/4W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R1160	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R1161	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R1162	1-216-295-00	SHORT	0		
R1163	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W
R1164	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R1165	1-216-295-00	SHORT	0		
R1166	1-216-043-91	RES,CHIP	560	5%	1/10W
R1167	1-216-295-00	SHORT	0		
R1169	1-216-043-91	RES,CHIP	560	5%	1/10W
R1170	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R1171	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R1172	1-216-295-00	SHORT	0		
R1173	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W
R1174	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R1175	1-216-025-00	RES,CHIP	100	5%	1/10W
R1176	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1177	1-216-001-00	RES,CHIP	10	5%	1/10W
R1178	1-216-023-00	RES,CHIP	82	5%	1/10W
R1179	1-216-025-00	RES,CHIP	100	5%	1/10W
R1180	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1181	1-249-407-11	CARBON	150	5%	1/4W
R1182	1-216-041-00	RES,CHIP	470	5%	1/10W
R1183	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W
R1184	1-216-653-11	METAL CHIP	1.2K	0.50%	1/10W
R1185	1-216-653-11	METAL CHIP	1.2K	0.50%	1/10W
R1186	1-216-615-11	METAL CHIP	33	0.50%	1/10W
R1187	1-216-615-11	METAL CHIP	33	0.50%	1/10W
R1188	1-249-389-11	CARBON	4.7	5%	1/4W F
R1189	1-249-389-11	CARBON	4.7	5%	1/4W F
R1190	1-249-421-11	CARBON	2.2K	5%	1/4W
R1191	1-249-421-11	CARBON	2.2K	5%	1/4W
R1192	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1193	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1194	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1196	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1197	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1198	1-216-089-00	RES,CHIP	47K	5%	1/10W
R1199	1-216-089-00	RES,CHIP	47K	5%	1/10W
R1200	1-249-385-11	CARBON	2.2	5%	1/4W F
R1201	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R1203	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R1205	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R1206	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1207	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1208	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1209	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1210	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1211	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
R1212	1-216-025-00	RES,CHIP	100	5%	1/10W
R1213	1-216-025-00	RES,CHIP	100	5%	1/10W
R1214	1-216-025-00	RES,CHIP	100	5%	1/10W
R1218	1-249-389-11	CARBON	4.7	5%	1/4W F
R1219	1-249-389-11	CARBON	4.7	5%	1/4W F
R1221	1-216-091-00	RES,CHIP	56K	5%	1/10W
R1222	1-249-389-11	CARBON	4.7	5%	1/4W F
R1223	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R1224	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W
R1225	1-249-385-11	CARBON	2.2	5%	1/4W F
R1226	1-216-613-11	METAL CHIP	27	0.50%	1/10W
R1227	1-216-613-11	METAL CHIP	27	0.50%	1/10W
R1228	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R1229	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R1230	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1231	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1232	1-249-421-11	CARBON	2.2K	5%	1/4W
R1233	1-249-421-11	CARBON	2.2K	5%	1/4W
R1234	1-216-671-11	METAL CHIP	6.8K	0.50%	1/10W
R1235	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R1236	1-216-061-00	RES,CHIP	3.3K	5%	1/10W

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REF. NO.	PART NO.	DESCRIPTION			REMARK
R1237	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R1238	1-216-673-11	METAL CHIP	8.2K	0.50%	1/10W
R1239	1-216-691-11	METAL CHIP	47K	0.50%	1/10W
R1240	1-216-691-11	METAL CHIP	47K	0.50%	1/10W
R1241	1-216-107-00	RES,CHIP	270K	5%	1/10W
R1242	1-216-693-11	METAL CHIP	56K	0.50%	1/10W
R1243	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R1244	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1245	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1246	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R1247	1-216-089-00	RES,CHIP	47K	5%	1/10W
R1248	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R1249	1-216-089-00	RES,CHIP	47K	5%	1/10W
R1250	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R1251	1-216-089-00	RES,CHIP	47K	5%	1/10W
R1252	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R1253	1-216-089-00	RES,CHIP	47K	5%	1/10W
R1254	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R1255	1-216-089-00	RES,CHIP	47K	5%	1/10W
R1256	1-216-025-00	RES,CHIP	100	5%	1/10W
R1257	1-216-025-00	RES,CHIP	100	5%	1/10W
R1258	1-216-089-00	RES,CHIP	47K	5%	1/10W
R1259	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R1260	1-216-089-00	RES,CHIP	47K	5%	1/10W
R1261	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R1262	1-216-089-00	RES,CHIP	47K	5%	1/10W
R1263	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R1264	1-216-089-00	RES,CHIP	47K	5%	1/10W
R1265	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R1266	1-216-089-00	RES,CHIP	47K	5%	1/10W
R1267	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R1268	1-216-295-00	SHORT	0		
R1269	1-216-295-00	SHORT	0		
R1270	1-216-295-00	SHORT	0		
R1271	1-216-295-00	SHORT	0		
R1272	1-216-693-11	METAL CHIP	56K	0.50%	1/10W
R1273	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R1274	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1275	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1276	1-216-077-00	RES,CHIP	15K	5%	1/10W
R1277	1-216-085-00	RES,CHIP	33K	5%	1/10W
R1278	1-216-085-00	RES,CHIP	33K	5%	1/10W
R1279	1-260-107-11	CARBON	4.7K	5%	1/2W
R1280	1-216-089-00	RES,CHIP	47K	5%	1/10W
R1281	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1282	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1283	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R1284	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R1285	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R1286	1-249-394-11	CARBON	12	5%	1/4W F
R1287	1-216-025-00	RES,CHIP	100	5%	1/10W
R1290	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1291	1-216-222-00	RES,CHIP	10K	5%	1/8W
R1292	1-216-025-00	RES,CHIP	100	5%	1/10W
R1293	1-216-025-00	RES,CHIP	100	5%	1/10W
R1294	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1298	1-216-031-00	RES,CHIP	180	5%	1/10W
R1299	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R1300	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R1301	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R1302	1-216-031-00	RES,CHIP	180	5%	1/10W
R1303	1-216-031-00	RES,CHIP	180	5%	1/10W
R1304	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R1305	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R1306	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R1307	1-216-680-11	METAL CHIP	16K	0.50%	1/10W
R1308	1-216-680-11	METAL CHIP	16K	0.50%	1/10W
R1309	1-216-680-11	METAL CHIP	16K	0.50%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R1310	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1311	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1312	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1313	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1314	1-216-025-00	RES,CHIP	100	5%	1/10W
R1315	1-216-025-00	RES,CHIP	100	5%	1/10W
R1316	1-216-025-00	RES,CHIP	100	5%	1/10W
R1317	1-216-025-00	RES,CHIP	100	5%	1/10W
R1318	1-216-025-00	RES,CHIP	100	5%	1/10W
R1319	1-216-025-00	RES,CHIP	100	5%	1/10W
R1320	1-216-077-00	RES,CHIP	15K	5%	1/10W
R1321	1-216-033-00	RES,CHIP	220	5%	1/10W
R1322	1-216-033-00	RES,CHIP	220	5%	1/10W
R1323	1-216-025-00	RES,CHIP	100	5%	1/10W
R1324	1-216-025-00	RES,CHIP	100	5%	1/10W
R1325	1-216-133-00	RES,CHIP	3.3M	5%	1/10W
R1328	1-216-295-00	SHORT	0		
R1329	1-216-295-00	SHORT	0		
R1330	1-216-677-11	METAL CHIP	12K	0.50%	1/10W
R1331	1-216-677-11	METAL CHIP	12K	0.50%	1/10W
R1332	1-216-677-11	METAL CHIP	12K	0.50%	1/10W
R1333	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1334	1-216-079-00	RES,CHIP	18K	5%	1/10W
R1335	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1337	1-216-089-00	RES,CHIP	47K	5%	1/10W
R1338	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1339	1-216-089-00	RES,CHIP	47K	5%	1/10W
R1340	1-216-041-00	RES,CHIP	470	5%	1/10W
R1341	1-216-089-00	RES,CHIP	47K	5%	1/10W
R1342	1-216-089-00	RES,CHIP	47K	5%	1/10W
R1343	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R1345	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1346	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1347	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R1348	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R1349	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1350	1-216-077-00	RES,CHIP	15K	5%	1/10W
R1351	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R1352	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R1353	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1354	1-216-025-00	RES,CHIP	100	5%	1/10W
R1355	1-216-083-00	RES,CHIP	27K	5%	1/10W
R1356	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1358	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1359	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1360	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R1361	1-216-025-00	RES,CHIP	100	5%	1/10W
R1362	1-216-025-00	RES,CHIP	100	5%	1/10W
R1363	1-216-035-00	RES,CHIP	270	5%	1/10W
R1364	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1365	1-216-295-00	SHORT	0		
R1366	1-216-025-00	RES,CHIP	100	5%	1/10W
R1367	1-216-295-00	SHORT	0		
R1368	1-216-295-00	SHORT	0		
R1369	1-216-295-00	SHORT	0		
R1371	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1372	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1373	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1374	1-216-043-91	RES,CHIP	560	5%	1/10W
R1375	1-216-043-91	RES,CHIP	560	5%	1/10W
R1376	1-216-037-00	RES,CHIP	330	5%	1/10W
R1377	1-216-025-00	RES,CHIP	100	5%	1/10W
R1378	1-216-025-00	RES,CHIP	100	5%	1/10W
R1379	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1380	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1381	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1382	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1383	1-216-017-00	RES,CHIP	47	5%	1/10W

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

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REF. NO.	PART NO.	DESCRIPTION			REMARK
R1384	1-216-017-00	RES,CHIP	47	5%	1/10W
R1385	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1386	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1387	1-216-037-00	RES,CHIP	330	5%	1/10W
R1388	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1389	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R1401	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1402	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1403	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1404	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R1405	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R1406	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1408	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1409	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1410	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R1412	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1413	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1414	1-216-033-00	RES,CHIP	220	5%	1/10W
R1415	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1416	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R1417	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1418	1-216-295-00	SHORT	0		
R1419	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1420	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1421	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1422	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1423	1-216-091-00	RES,CHIP	56K	5%	1/10W
R1424	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1425	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R1426	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R1427	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1429	1-216-041-00	RES,CHIP	470	5%	1/10W
R1430	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1431	1-216-025-00	RES,CHIP	100	5%	1/10W
R1432	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1433	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1434	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R1435	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R1436	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R1438	1-216-295-00	SHORT	0		
R1440	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R1443	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1444	1-216-041-00	RES,CHIP	470	5%	1/10W
R1445	1-216-041-00	RES,CHIP	470	5%	1/10W
R1446	1-216-025-00	RES,CHIP	100	5%	1/10W
R1447	1-216-295-00	SHORT	0		
R1448	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1449	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1450	1-216-037-00	RES,CHIP	330	5%	1/10W
R1451	1-216-093-00	RES,CHIP	68K	5%	1/10W
R1453	1-216-025-00	RES,CHIP	100	5%	1/10W
R1454	1-216-041-00	RES,CHIP	470	5%	1/10W
R1456	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1458	1-216-295-00	SHORT	0		
R1461	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R1463	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R1464	1-216-017-00	RES,CHIP	47	5%	1/10W
R1465	1-216-647-11	METAL CHIP	680	0.50%	1/10W
R1466	1-216-043-91	RES,CHIP	560	5%	1/10W
R1467	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1468	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R1469	1-216-643-11	METAL CHIP	470	0.50%	1/10W
R1470	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1484	1-216-295-00	SHORT	0		
R1487	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1488	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R1489	1-216-627-11	METAL CHIP	100	0.50%	1/10W
R1491	1-249-411-11	CARBON	330	5%	1/4W
R1494	1-216-295-00	SHORT	0		

REF. NO.	PART NO.	DESCRIPTION			REMARK
R1495	1-216-295-00	SHORT	0		
R1498	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1499	1-216-041-00	RES,CHIP	470	5%	1/10W
R1503	1-216-089-00	RES,CHIP	47K	5%	1/10W
R1504	1-216-089-00	RES,CHIP	47K	5%	1/10W
R1505	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1506	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1507	1-216-033-00	RES,CHIP	220	5%	1/10W
R1508	1-216-295-00	SHORT	0		
R1509	1-216-295-00	SHORT	0		
R1512	1-216-047-91	RES,CHIP	820	5%	1/10W
R1513	1-216-295-00	SHORT	0		
R1514	1-216-295-00	SHORT	0		
R1515	1-216-295-00	SHORT	0		
R1516	1-216-033-00	RES,CHIP	220	5%	1/10W
R1517	1-216-295-00	SHORT	0		
R1518	1-216-295-00	SHORT	0		
R1519	1-249-394-11	CARBON	12	5%	1/4W F
R1520	1-216-025-00	RES,CHIP	100	5%	1/10W
R1521	1-216-033-00	RES,CHIP	220	5%	1/10W
R1522	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1523	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1524	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1525	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1526	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1527	1-216-025-00	RES,CHIP	100	5%	1/10W
R1528	1-216-089-00	RES,CHIP	47K	5%	1/10W
R1529	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R1531	1-216-295-00	SHORT	0		
R1532	1-216-295-00	SHORT	0		
R1533	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R1534	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R1535	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R1536	1-216-643-11	METAL CHIP	470	0.50%	1/10W
R1537	1-216-643-11	METAL CHIP	470	0.50%	1/10W
R1538	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1539	1-216-643-11	METAL CHIP	470	0.50%	1/10W
R1540	1-216-025-00	RES,CHIP	100	5%	1/10W
R1541	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R1542	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1543	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1545	1-216-079-00	RES,CHIP	18K	5%	1/10W
R1546	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R1547	1-216-097-00	RES,CHIP	100K	5%	1/10W
R1548	1-216-083-00	RES,CHIP	27K	5%	1/10W
R1549	1-216-073-00	RES,CHIP	10K	5%	1/10W

<TEST PIN>

TP1004	* 1-537-864-11	PIN, POST	
TP1005	* 1-537-864-11	PIN, POST	
TP1006	* 1-537-864-11	PIN, POST	

<TUNER>

TU1001	⚠ 1-693-340-23	TUNER/VIF	
TU1002	⚠ 1-693-340-23	TUNER/VIF	

<CRYSTAL>

X1001	1-577-082-11	VIBRATOR, CERAMIC	
X1002	1-760-551-21	VIBRATOR, CERAMIC	
X1101	1-579-689-21	VIBRATOR, CRYSTAL	

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The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

G C

REF. NO.	PART NO.	DESCRIPTION				REMARK
	* A-1311-494-A	G BOARD, COMPLETE **********				
	4-382-854-11	SCREW (M3X10), P, SW (+)				
		<CAPACITOR>				
C601	1-125-483-11	ELECT (BLOCK)	470MF	20%	400V	
C602	1-164-625-11	CERAMIC	680PF	10%	500V	
C603	1-164-625-11	CERAMIC	680PF	10%	500V	
C604	1-137-194-81	FILM	0.47MF	5%	50V	
C605	1-136-171-00	FILM	0.33MF	5%	50V	
C606	1-164-645-11	CERAMIC	1000PF	10%	500V	
C607	1-137-194-81	FILM	0.47MF	5%	50V	
C608	1-136-171-00	FILM	0.33MF	5%	50V	
C609	1-129-718-00	FILM	0.022MF	5%	630V	
C610	1-126-953-11	ELECT	2200MF	20%	35V	
C611	1-126-964-11	ELECT	10MF	20%	50V	
C612	1-126-942-61	ELECT	1000MF	20%	25V	
C613	1-126-964-11	ELECT	10MF	20%	50V	
C614	1-104-664-11	ELECT	47MF	20%	25V	
C615	1-102-129-00	CERAMIC	0.01MF	10%	50V	
C616	1-102-129-00	CERAMIC	0.01MF	10%	50V	
C617	1-102-050-00	CERAMIC	0.01MF		500V	
C618	1-126-937-11	ELECT	4700MF	20%	16V	
C619	1-126-937-11	ELECT	4700MF	20%	16V	
C620	1-104-664-11	ELECT	47MF	20%	25V	
C621	1-102-129-00	CERAMIC	0.01MF	10%	50V	
C622	1-104-664-11	ELECT	47MF	20%	25V	
C623	1-102-129-00	CERAMIC	0.01MF	10%	50V	
C624	1-126-960-11	ELECT	1MF	20%	50V	
C627	1-136-157-00	FILM	0.022MF	5%	50V	
C628	1-136-161-00	FILM	0.047MF	5%	50V	
C629	1-126-967-11	ELECT	47MF	20%	50V	
C630	1-102-050-00	CERAMIC	0.01MF		500V	
		<CONNECTOR>				
CN6001	* 1-691-291-11	PIN, CONNECTOR (PC BOARD) 5P				
CN6002	* 1-691-960-11	PIN, CONNECTOR (PC BOARD) 3P				
CN6003	* 1-564-506-11	PLUG, CONNECTOR 3P				
CN6004	* 1-564-509-11	PLUG, CONNECTOR 6P				
CN6005	* 1-564-512-11	PLUG, CONNECTOR 9P				
CN6006	* 1-564-510-11	PLUG, CONNECTOR 7P				
		<DIODE>				
D601	8-719-911-19	DIODE 1SS119-25				
D602	8-719-911-19	DIODE 1SS119-25				
D603	8-719-052-92	DIODE D10SBS4F				
D604	8-719-312-47	DIODE RBA-406B				
D605	8-719-052-92	DIODE D10SBS4F				
D606	8-719-110-41	DIODE RD15ESB2				
D607	8-719-911-19	DIODE 1SS119-25				
D608	8-719-911-19	DIODE 1SS119-25				
D610	8-719-911-19	DIODE 1SS119-25				
D611	8-719-911-19	DIODE 1SS119-25				
D612	⚠ 8-719-510-63	DIODE D4SB60L-F				
		<FERRITE BEAD>				
FB601	1-410-396-41	FERRITE	0.45UH			
FB602	1-410-396-41	FERRITE	0.45UH			
		<IC>				
IC601	8-759-908-15	IC TL431CLP				

REF. NO.	PART NO.	DESCRIPTION				REMARK
		<COIL>				
L602	1-412-519-11	INDUCTOR 3.3UH				
L603	1-408-603-31	INDUCTOR 10UH				
L604	1-412-519-11	INDUCTOR 3.3UH				
L605	1-403-588-11	INDUCTOR 22UH				
L606	1-412-519-11	INDUCTOR 3.3UH				
		<TRANSISTOR>				
Q601	8-729-016-15	TRANSISTOR 2SC4833MNP				
Q602	8-729-016-15	TRANSISTOR 2SC4833MNP				
Q603	8-729-026-41	TRANSISTOR 2SA933AS-QRT				
		<RESISTOR>				
R601	1-260-129-11	CARBON	330K	5%	1/2W	
R602	1-260-129-11	CARBON	330K	5%	1/2W	
R603	1-215-471-00	METAL	120K	1%	1/4W	
R604	1-215-471-00	METAL	120K	1%	1/4W	
R605	1-249-387-11	CARBON	3.3	5%	1/4W	
R606	1-249-393-11	CARBON	10	5%	1/4W	
R607	1-215-471-00	METAL	120K	1%	1/4W	
R608	1-215-471-00	METAL	120K	1%	1/4W	
R609	1-249-387-11	CARBON	3.3	5%	1/4W	
R610	1-249-393-11	CARBON	10	5%	1/4W	
R611	1-216-370-11	METAL OXIDE	1.2	5%	2W	F
R617	1-202-933-61	FUSIBLE	0.1	10%	1/2W	F
R618	1-215-447-00	METAL	12K	1%	1/4W	
R619	1-249-435-11	CARBON	33K	5%	1/4W	
R621	1-215-432-00	METAL	3K	1%	1/4W	
R622	1-249-417-11	CARBON	1K	5%	1/4W	
R623	1-247-807-31	CARBON	100	5%	1/4W	
R624	1-249-425-11	CARBON	4.7K	5%	1/4W	
R625	1-249-418-11	CARBON	1.2K	5%	1/4W	
		<TRANSFORMER>				
T601	⚠ 1-429-839-11	TRANSFORMER, CONVERTER (PIT)				
T602	⚠ 1-427-864-13	TRANSFORMER, CONVERTER (PRT)				

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	* A-1335-072-A	C BOARD, COMPLETE **********				
		<CAPACITOR>				
C5001	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C5002	1-104-664-11	ELECT	47MF	20%	10V	
C5003	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C5004	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C5005	1-126-962-11	ELECT	3.3MF	20%	50V	
C5006	1-164-182-11	CERAMIC CHIP	0.0033MF	10%	50V	
C5007	1-163-104-00	CERAMIC CHIP	30PF	5%	50V	
C5008	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	
C5009	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C5016	1-163-108-00	CERAMIC CHIP	43PF	5%	50V	
C5017	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	
C5018	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C5019	1-164-182-11	CERAMIC CHIP	0.0033MF	10%	50V	
C5020	1-126-962-11	ELECT	3.3MF	20%	50V	
C5021	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C5022	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C5023	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C5024	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C5025	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C5026	1-104-664-11	ELECT	47MF	20%	10V	
C5027	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	

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REF. NO.	PART NO.	DESCRIPTION			REMARK
C5028	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C5029	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5030	1-104-664-11	ELECT	47MF	20%	25V
C5039	1-104-664-11	ELECT	47MF	20%	25V
C5040	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5041	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5042	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5043	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5044	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5045	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5046	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5047	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5048	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5049	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5050	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5051	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C5054	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C5055	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C5056	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C5057	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C5058	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C5059	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C5073	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C5201	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5202	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5203	1-104-664-11	ELECT	47MF	20%	25V
C5204	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5205	1-104-664-11	ELECT	47MF	20%	10V
C5206	1-104-664-11	ELECT	47MF	20%	16V
C5207	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5209	1-104-664-11	ELECT	47MF	20%	25V
C5210	1-104-664-11	ELECT	47MF	20%	25V
C5212	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5213	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5214	1-104-664-11	ELECT	47MF	20%	25V
C5215	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5216	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5217	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5218	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5219	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5220	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5221	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5222	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5223	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5224	1-104-664-11	ELECT	47MF	20%	10V
C5225	1-104-664-11	ELECT	47MF	20%	10V
C5226	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5227	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5228	1-104-664-11	ELECT	47MF	20%	25V
C5229	1-107-689-21	TANTAL. CHIP	1MF	20%	35V
C5230	1-107-689-21	TANTAL. CHIP	1MF	20%	35V
C5231	1-107-689-21	TANTAL. CHIP	1MF	20%	35V
C5232	1-107-689-21	TANTAL. CHIP	1MF	20%	35V
C5233	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5234	1-126-964-11	ELECT	10MF	20%	50V
C5235	1-104-664-11	ELECT	47MF	20%	25V
C5236	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5237	1-104-664-11	ELECT	47MF	20%	16V
C5238	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5241	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5242	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5243	1-104-664-11	ELECT	47MF	20%	16V
C5244	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C5245	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5246	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5247	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5248	1-104-664-11	ELECT	47MF	20%	16V
C5251	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5401	1-104-664-11	ELECT	47MF	20%	16V
C5402	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5409	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5411	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5412	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5413	1-104-664-11	ELECT	47MF	20%	25V
C5414	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5415	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5416	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5417	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5418	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5419	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5420	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5421	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5422	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5423	1-104-664-11	ELECT	47MF	20%	10V
C5424	1-104-664-11	ELECT	47MF	20%	10V
C5425	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5426	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5427	1-104-664-11	ELECT	47MF	20%	25V
C5428	1-107-689-21	TANTAL. CHIP	1MF	20%	35V
C5429	1-107-689-21	TANTAL. CHIP	1MF	20%	35V
C5430	1-107-689-21	TANTAL. CHIP	1MF	20%	35V
C5431	1-107-689-21	TANTAL. CHIP	1MF	20%	35V
C5432	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5433	1-126-964-11	ELECT	10MF	20%	50V
C5434	1-104-664-11	ELECT	47MF	20%	25V
C5435	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5436	1-104-664-11	ELECT	47MF	20%	16V
C5437	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5440	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5441	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5442	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5601	1-104-664-11	ELECT	47MF	20%	16V
C5602	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5605	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5608	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5609	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5610	1-104-664-11	ELECT	47MF	20%	25V
C5611	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5612	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5613	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5614	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5615	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5616	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5617	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5618	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5619	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5620	1-104-664-11	ELECT	47MF	20%	10V
C5621	1-104-664-11	ELECT	47MF	20%	10V
C5622	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5623	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5624	1-104-664-11	ELECT	47MF	20%	25V
C5625	1-107-689-21	TANTAL. CHIP	1MF	20%	35V
C5626	1-107-689-21	TANTAL. CHIP	1MF	20%	35V
C5627	1-107-689-21	TANTAL. CHIP	1MF	20%	35V
C5628	1-107-689-21	TANTAL. CHIP	1MF	20%	35V
C5629	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5630	1-126-964-11	ELECT	10MF	20%	50V
C5631	1-104-664-11	ELECT	47MF	20%	25V
C5632	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5633	1-104-664-11	ELECT	47MF	20%	16V
C5634	1-104-664-11	ELECT	47MF	20%	16V
C5635	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5636	1-104-664-11	ELECT	47MF	20%	16V
C5637	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5640	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5641	1-104-664-11	ELECT	47MF	20%	16V
C5642	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5643	1-165-319-11	CERAMIC CHIP	0.1MF		50V

C

REF. NO.	PART NO.	DESCRIPTION	REMARK
C5644	1-165-319-11	CERAMIC CHIP 0.1MF	50V
		<CONNECTOR>	
CN5001	1-691-093-11	CONNECTOR, FFC (ZIF) 20P	
CN5002	1-691-093-11	CONNECTOR, FFC (ZIF) 20P	
CN5003	1-691-093-11	CONNECTOR, FFC (ZIF) 20P	
CN5201	* 1-564-524-11	PLUG, CONNECTOR 9P	
CN5202	* 1-564-525-11	PLUG, CONNECTOR 10P	
		<DIODE>	
D5001	8-719-002-81	DIODE 1T363	
D5003	8-719-002-81	DIODE 1T363	
D5034	8-719-158-07	DIODE RD4.7SB	
D5035	8-719-158-07	DIODE RD4.7SB	
D5040	8-719-404-49	DIODE MA111	
D5041	8-719-404-49	DIODE MA111	
D5043	8-719-420-51	DIODE MA729	
D5044	8-719-404-49	DIODE MA111	
D5045	8-719-404-49	DIODE MA111	
D5046	8-719-404-49	DIODE MA111	
D5047	8-719-404-49	DIODE MA111	
D5049	8-719-404-49	DIODE MA111	
D5201	8-719-404-49	DIODE MA111	
D5202	8-719-801-78	DIODE 1SS184	
D5214	8-719-404-49	DIODE MA111	
D5402	8-719-801-78	DIODE 1SS184	
D5414	8-719-404-49	DIODE MA111	
D5601	8-719-404-49	DIODE MA111	
D5602	8-719-801-78	DIODE 1SS184	
D5614	8-719-404-49	DIODE MA111	
		<FERRITE BEAD>	
FB5001	1-543-813-21	FERRITE 0UH	
FB5002	1-543-813-21	FERRITE 0UH	
FB5003	1-543-813-21	FERRITE 0UH	
FB5004	1-543-813-21	FERRITE 0UH	
FB5005	1-543-813-21	FERRITE 0UH	
FB5010	1-543-813-21	FERRITE 0UH	
FB5011	1-543-813-21	FERRITE 0UH	
FB5012	1-543-813-21	FERRITE 0UH	
FB5013	1-412-364-11	FERRITE 0UH	
FB5014	1-412-364-11	FERRITE 0UH	
FB5015	1-412-364-11	FERRITE 0UH	
FB5016	1-412-364-11	FERRITE 0UH	
FB5017	1-412-364-11	FERRITE 0UH	
FB5018	1-412-364-11	FERRITE 0UH	
FB5019	1-412-364-11	FERRITE 0UH	
FB5025	1-543-813-21	FERRITE 0UH	
FB5026	1-543-813-21	FERRITE 0UH	
FB5201	1-412-364-11	FERRITE 0UH	
FB5401	1-412-364-11	FERRITE 0UH	
FB5601	1-412-364-11	FERRITE 0UH	
FB5602	1-412-364-11	FERRITE 0UH	
		<FILTER>	
FL5001	1-233-539-21	FILTER, EMI	
FL5002	1-233-539-21	FILTER, EMI	
FL5003	1-239-400-11	FILTER, CHIP EMI	
FL5004	1-239-400-11	FILTER, CHIP EMI	
FL5005	1-239-400-11	FILTER, CHIP EMI	
FL5006	1-239-400-11	FILTER, CHIP EMI	
FL5007	1-239-400-11	FILTER, CHIP EMI	
FL5008	1-239-400-11	FILTER, CHIP EMI	
FL5009	1-239-400-11	FILTER, CHIP EMI	
FL5010	1-239-400-11	FILTER, CHIP EMI	
FL5011	1-233-539-21	FILTER, EMI	
FL5012	1-233-513-21	FILTER, EMI	
FL5013	1-233-513-21	FILTER, EMI	
FL5014	1-233-513-21	FILTER, EMI	
FL5015	1-233-513-21	FILTER, EMI	
FL5016	1-233-539-21	FILTER, EMI	
FL5017	1-233-539-21	FILTER, EMI	
		<IC>	
IC5002	8-759-103-09	IC uPC4082G2	
IC5003	8-759-103-09	IC uPC4082G2	
IC5004	8-752-375-83	IC CXD2412AQ	
IC5005	4-382-854-01	SCREW (M3X8), P, SW (+)	
IC5005	8-759-324-92	IC PQ15RF16	
IC5006	8-759-098-24	IC PQ30RV11	
IC5007	4-382-854-01	SCREW (M3X8), P, SW (+)	
IC5007	8-759-701-56	IC NJM78M05FA	
IC5201	8-752-071-58	IC CXA1819Q	
IC5401	8-752-071-58	IC CXA1819Q	
IC5601	8-752-071-58	IC CXA1819Q	
IC5602	8-752-058-68	IC CXA1315M	
		<COIL>	
L5001	1-410-466-41	INDUCTOR 4.7UH	
L5002	1-427-791-21	TRANSFORMER, DETECTOR	
L5004	1-427-792-21	TRANSFORMER, DETECTOR	
L5005	1-410-470-11	INDUCTOR 10UH	
L5202	1-410-470-11	INDUCTOR 10UH	
L5601	1-410-470-11	INDUCTOR 10UH	
L5602	1-410-470-11	INDUCTOR 10UH	
		<TRANSISTOR>	
Q5001	8-729-920-21	TRANSISTOR DTC314TK-T-146	
Q5203	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5204	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q5205	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q5206	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5207	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5209	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q5210	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q5214	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5215	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q5216	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q5217	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5218	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5219	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q5220	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q5221	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5222	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5223	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q5224	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q5225	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5226	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5227	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q5228	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q5229	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5234	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q5235	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5237	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q5238	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5403	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5404	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q5405	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q5406	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5407	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5409	8-729-620-06	TRANSISTOR 2SC3052-EF	

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REF. NO.	PART NO.	DESCRIPTION	REMARK
Q5415	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5416	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q5417	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q5418	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5419	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5420	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q5421	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q5422	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5423	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5424	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q5425	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q5426	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5427	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5428	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q5429	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q5430	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5433	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5435	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q5603	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5604	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q5605	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q5606	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5607	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5609	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q5614	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5615	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q5616	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q5617	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5618	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5619	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q5620	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q5621	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5622	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5623	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q5624	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q5625	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5626	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5627	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q5628	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q5629	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5632	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5634	8-729-620-06	TRANSISTOR 2SC3052-EF	

<RESISTOR>

R5001	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R5002	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R5003	1-216-091-00	RES,CHIP	56K	5%	1/10W
R5006	1-216-295-00	SHORT	0		
R5007	1-216-025-00	RES,CHIP	100	5%	1/10W
R5008	1-216-025-00	RES,CHIP	100	5%	1/10W
R5017	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R5019	1-216-091-00	RES,CHIP	56K	5%	1/10W
R5028	1-216-077-00	RES,CHIP	15K	5%	1/10W
R5029	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R5030	1-216-689-11	RES,CHIP	39K	5%	1/10W
R5031	1-216-049-00	RES,CHIP	1K	5%	1/10W
R5032	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5033	1-208-845-11	RES,CHIP	1M	5%	1/10W
R5034	1-208-845-11	RES,CHIP	1M	5%	1/10W
R5035	1-216-085-00	RES,CHIP	33K	5%	1/10W
R5044	1-216-085-00	RES,CHIP	33K	5%	1/10W
R5045	1-208-845-11	RES,CHIP	1M	5%	1/10W
R5046	1-208-845-11	RES,CHIP	1M	5%	1/10W
R5047	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5048	1-216-689-11	RES,CHIP	39K	5%	1/10W
R5049	1-216-049-00	RES,CHIP	1K	5%	1/10W
R5050	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R5051	1-216-075-00	RES,CHIP	12K	5%	1/10W
R5052	1-208-845-11	RES,CHIP	1M	5%	1/10W
R5053	1-208-845-11	RES,CHIP	1M	5%	1/10W
R5057	1-216-295-00	SHORT	0		
R5058	1-216-295-00	SHORT	0		
R5059	1-216-295-00	SHORT	0		
R5060	1-216-295-00	SHORT	0		
R5065	1-208-845-11	RES,CHIP	1M	5%	1/10W
R5066	1-208-845-11	RES,CHIP	1M	5%	1/10W
R5071	1-216-033-00	RES,CHIP	220	5%	1/10W
R5072	1-216-033-00	RES,CHIP	220	5%	1/10W
R5073	1-216-019-00	RES,CHIP	56	5%	1/10W
R5074	1-216-019-00	RES,CHIP	56	5%	1/10W
R5087	1-216-049-00	RES,CHIP	1K	5%	1/10W
R5089	1-216-295-00	SHORT	0		
R5092	1-216-043-91	RES,CHIP	560	5%	1/10W
R5093	1-216-043-91	RES,CHIP	560	5%	1/10W
R5094	1-216-043-91	RES,CHIP	560	5%	1/10W
R5095	1-216-043-91	RES,CHIP	560	5%	1/10W
R5097	1-216-025-00	RES,CHIP	100	5%	1/10W
R5098	1-216-085-00	RES,CHIP	33K	5%	1/10W
R5099	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R5100	1-216-025-00	RES,CHIP	100	5%	1/10W
R5101	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R5103	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R5106	1-216-089-00	RES,CHIP	47K	5%	1/10W
R5107	1-216-049-00	RES,CHIP	1K	5%	1/10W
R5108	1-216-664-11	METAL CHIP	3.6K	0.50%	1/10W
R5109	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R5110	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R5120	1-216-295-00	SHORT	0		
R5121	1-216-295-00	SHORT	0		
R5123	1-216-295-00	SHORT	0		
R5124	1-216-027-00	RES,CHIP	120	5%	1/10W
R5125	1-216-027-00	RES,CHIP	120	5%	1/10W
R5126	1-216-027-00	RES,CHIP	120	5%	1/10W
R5201	1-216-001-00	RES,CHIP	10	5%	1/10W
R5202	1-216-398-11	METAL OXIDE	5.6	5%	3W F
R5203	1-208-845-11	RES,CHIP	1M	5%	1/10W
R5205	1-216-295-00	SHORT	0		
R5206	1-216-039-00	RES,CHIP	390	5%	1/10W
R5207	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R5208	1-216-619-11	METAL CHIP	47	0.50%	1/10W
R5209	1-216-049-00	RES,CHIP	1K	5%	1/10W
R5210	1-216-077-00	RES,CHIP	15K	5%	1/10W
R5211	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R5212	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R5213	1-216-647-11	METAL CHIP	680	0.50%	1/10W
R5214	1-216-643-11	METAL CHIP	470	0.50%	1/10W
R5215	1-216-017-00	RES,CHIP	47	5%	1/10W
R5216	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W
R5218	1-216-043-91	RES,CHIP	560	5%	1/10W
R5219	1-216-672-11	METAL CHIP	7.5K	0.50%	1/10W
R5220	1-216-679-11	METAL CHIP	15K	0.50%	1/10W
R5221	1-216-049-00	RES,CHIP	1K	5%	1/10W
R5222	1-216-295-00	SHORT	0		
R5223	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R5224	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R5226	1-216-295-00	SHORT	0		
R5227	1-216-653-11	METAL CHIP	1.2K	0.50%	1/10W
R5228	1-216-671-11	METAL CHIP	6.8K	0.50%	1/10W
R5229	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R5230	1-216-673-11	METAL CHIP	8.2K	0.50%	1/10W
R5231	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R5232	1-216-295-00	SHORT	0		
R5233	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R5234	1-216-295-00	SHORT	0		
R5235	1-216-057-00	RES,CHIP	2.2K	5%	1/10W

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REF. NO.	PART NO.	DESCRIPTION			REMARK
R5236	1-216-295-00	SHORT	0		
R5237	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R5238	1-216-660-11	METAL CHIP	2.4K	0.50%	1/10W
R5239	1-216-666-11	METAL CHIP	4.3K	0.50%	1/10W
R5240	1-216-295-00	SHORT	0		
R5241	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R5242	1-216-295-00	SHORT	0		
R5243	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R5244	1-216-295-00	SHORT	0		
R5245	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R5246	1-216-295-00	SHORT	0		
R5248	1-216-295-00	SHORT	0		
R5249	1-216-295-00	SHORT	0		
R5250	1-216-111-00	RES,CHIP	390K	5%	1/10W
R5252	1-216-111-00	RES,CHIP	390K	5%	1/10W
R5253	1-216-111-00	RES,CHIP	390K	5%	1/10W
R5254	1-216-111-00	RES,CHIP	390K	5%	1/10W
R5256	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R5257	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R5258	1-216-298-00	RES,CHIP	2.2	5%	1/10W
R5259	1-216-298-00	RES,CHIP	2.2	5%	1/10W
R5260	1-216-001-00	RES,CHIP	10	5%	1/10W
R5261	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R5262	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R5263	1-216-298-00	RES,CHIP	2.2	5%	1/10W
R5264	1-216-298-00	RES,CHIP	2.2	5%	1/10W
R5265	1-216-001-00	RES,CHIP	10	5%	1/10W
R5266	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R5267	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R5268	1-216-298-00	RES,CHIP	2.2	5%	1/10W
R5269	1-216-298-00	RES,CHIP	2.2	5%	1/10W
R5270	1-216-001-00	RES,CHIP	10	5%	1/10W
R5271	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R5272	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R5273	1-216-298-00	RES,CHIP	2.2	5%	1/10W
R5274	1-216-298-00	RES,CHIP	2.2	5%	1/10W
R5275	1-216-001-00	RES,CHIP	10	5%	1/10W
R5276	1-216-001-00	RES,CHIP	10	5%	1/10W
R5285	1-216-077-00	RES,CHIP	15K	5%	1/10W
R5286	1-216-085-00	RES,CHIP	33K	5%	1/10W
R5287	1-216-025-00	RES,CHIP	100	5%	1/10W
R5288	1-216-295-00	SHORT	0		
R5290	1-216-619-11	METAL CHIP	47	0.50%	1/10W
R5292	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5293	1-216-071-00	RES,CHIP	8.2K	5%	1/10W
R5294	1-216-643-11	METAL CHIP	470	0.50%	1/10W
R5295	1-216-017-00	RES,CHIP	47	5%	1/10W
R5296	1-216-681-11	METAL CHIP	18K	0.50%	1/10W
R5297	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R5298	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R5301	1-216-295-00	SHORT	0		
R5302	1-216-295-00	SHORT	0		
R5305	1-216-025-00	RES,CHIP	100	5%	1/10W
R5306	1-216-025-00	RES,CHIP	100	5%	1/10W
R5401	1-216-001-00	RES,CHIP	10	5%	1/10W
R5402	1-216-295-00	SHORT	0		
R5403	1-208-845-11	RES,CHIP	1M	5%	1/10W
R5405	1-216-295-00	SHORT	0		
R5406	1-216-039-00	RES,CHIP	390	5%	1/10W
R5407	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R5408	1-216-619-11	METAL CHIP	47	0.50%	1/10W
R5409	1-216-049-00	RES,CHIP	1K	5%	1/10W
R5410	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5411	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R5412	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R5413	1-216-647-11	METAL CHIP	680	0.50%	1/10W
R5414	1-216-643-11	METAL CHIP	470	0.50%	1/10W
R5415	1-216-017-00	RES,CHIP	47	5%	1/10W
R5416	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R5418	1-216-043-91	RES,CHIP	560	5%	1/10W
R5422	1-216-295-00	SHORT	0		
R5423	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R5424	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R5430	1-216-295-00	SHORT	0		
R5431	1-216-653-11	METAL CHIP	1.2K	0.50%	1/10W
R5432	1-216-671-11	METAL CHIP	6.8K	0.50%	1/10W
R5433	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R5434	1-216-673-11	METAL CHIP	8.2K	0.50%	1/10W
R5435	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R5436	1-216-295-00	SHORT	0		
R5437	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R5438	1-216-295-00	SHORT	0		
R5439	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R5440	1-216-295-00	SHORT	0		
R5441	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R5442	1-216-660-11	METAL CHIP	2.4K	0.50%	1/10W
R5443	1-216-666-11	METAL CHIP	4.3K	0.50%	1/10W
R5444	1-216-295-00	SHORT	0		
R5445	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R5446	1-216-295-00	SHORT	0		
R5447	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R5448	1-216-295-00	SHORT	0		
R5449	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R5452	1-216-295-00	SHORT	0		
R5453	1-216-295-00	SHORT	0		
R5455	1-216-111-00	RES,CHIP	390K	5%	1/10W
R5456	1-216-111-00	RES,CHIP	390K	5%	1/10W
R5457	1-216-111-00	RES,CHIP	390K	5%	1/10W
R5458	1-216-111-00	RES,CHIP	390K	5%	1/10W
R5459	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R5460	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R5461	1-216-298-00	RES,CHIP	2.2	5%	1/10W
R5462	1-216-298-00	RES,CHIP	2.2	5%	1/10W
R5463	1-216-001-00	RES,CHIP	10	5%	1/10W
R5464	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R5465	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R5466	1-216-298-00	RES,CHIP	2.2	5%	1/10W
R5467	1-216-298-00	RES,CHIP	2.2	5%	1/10W
R5468	1-216-001-00	RES,CHIP	10	5%	1/10W
R5469	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R5470	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R5471	1-216-298-00	RES,CHIP	2.2	5%	1/10W
R5472	1-216-298-00	RES,CHIP	2.2	5%	1/10W
R5473	1-216-001-00	RES,CHIP	10	5%	1/10W
R5474	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R5475	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R5476	1-216-298-00	RES,CHIP	2.2	5%	1/10W
R5477	1-216-298-00	RES,CHIP	2.2	5%	1/10W
R5478	1-216-001-00	RES,CHIP	10	5%	1/10W
R5479	1-216-001-00	RES,CHIP	10	5%	1/10W
R5484	1-216-295-00	SHORT	0		
R5488	1-216-071-00	RES,CHIP	8.2K	5%	1/10W
R5489	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R5490	1-216-643-11	METAL CHIP	470	0.50%	1/10W
R5491	1-216-017-00	RES,CHIP	47	5%	1/10W
R5494	1-216-025-00	RES,CHIP	100	5%	1/10W
R5495	1-216-025-00	RES,CHIP	100	5%	1/10W
R5601	1-216-001-00	RES,CHIP	10	5%	1/10W
R5602	1-216-295-00	SHORT	0		
R5603	1-208-845-11	RES,CHIP	1M	5%	1/10W
R5605	1-216-295-00	SHORT	0		
R5606	1-216-039-00	RES,CHIP	390	5%	1/10W
R5607	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R5608	1-216-619-11	METAL CHIP	47	0.50%	1/10W
R5609	1-216-049-00	RES,CHIP	1K	5%	1/10W
R5610	1-216-077-00	RES,CHIP	15K	5%	1/10W
R5611	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R5612	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W

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REF. NO.	PART NO.	DESCRIPTION			REMARK
R5613	1-216-647-11	METAL CHIP	680	0.50%	1/10W
R5614	1-216-643-11	METAL CHIP	470	0.50%	1/10W
R5615	1-216-017-00	RES,CHIP	47	5%	1/10W
R5616	1-216-664-11	METAL CHIP	3.6K	0.50%	1/10W
R5618	1-216-043-91	RES,CHIP	560	5%	1/10W
R5622	1-216-295-00	SHORT	0		
R5623	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R5624	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R5627	1-216-295-00	SHORT	0		
R5628	1-216-653-11	METAL CHIP	1.2K	0.50%	1/10W
R5629	1-216-671-11	METAL CHIP	6.8K	0.50%	1/10W
R5630	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R5631	1-216-673-11	METAL CHIP	8.2K	0.50%	1/10W
R5632	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R5633	1-216-295-00	SHORT	0		
R5634	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R5635	1-216-295-00	SHORT	0		
R5636	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R5637	1-216-295-00	SHORT	0		
R5638	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R5639	1-216-660-11	METAL CHIP	2.4K	0.50%	1/10W
R5640	1-216-666-11	METAL CHIP	4.3K	0.50%	1/10W
R5641	1-216-295-00	SHORT	0		
R5642	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R5643	1-216-295-00	SHORT	0		
R5644	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R5645	1-216-295-00	SHORT	0		
R5646	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R5649	1-216-295-00	SHORT	0		
R5650	1-216-295-00	SHORT	0		
R5652	1-216-111-00	RES,CHIP	390K	5%	1/10W
R5653	1-216-111-00	RES,CHIP	390K	5%	1/10W
R5654	1-216-111-00	RES,CHIP	390K	5%	1/10W
R5655	1-216-111-00	RES,CHIP	390K	5%	1/10W
R5656	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R5657	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R5658	1-216-298-00	RES,CHIP	2.2	5%	1/10W
R5659	1-216-298-00	RES,CHIP	2.2	5%	1/10W
R5670	1-216-001-00	RES,CHIP	10	5%	1/10W
R5671	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R5672	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R5673	1-216-298-00	RES,CHIP	2.2	5%	1/10W
R5674	1-216-298-00	RES,CHIP	2.2	5%	1/10W
R5675	1-216-001-00	RES,CHIP	10	5%	1/10W
R5676	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R5677	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R5678	1-216-298-00	RES,CHIP	2.2	5%	1/10W
R5679	1-216-298-00	RES,CHIP	2.2	5%	1/10W
R5680	1-216-001-00	RES,CHIP	10	5%	1/10W
R5681	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R5682	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R5683	1-216-298-00	RES,CHIP	2.2	5%	1/10W
R5684	1-216-298-00	RES,CHIP	2.2	5%	1/10W
R5685	1-216-001-00	RES,CHIP	10	5%	1/10W
R5686	1-216-001-00	RES,CHIP	10	5%	1/10W
R5687	1-216-077-00	RES,CHIP	15K	5%	1/10W
R5688	1-216-077-00	RES,CHIP	15K	5%	1/10W
R5689	1-216-077-00	RES,CHIP	15K	5%	1/10W
R5691	1-216-025-00	RES,CHIP	100	5%	1/10W
R5692	1-216-025-00	RES,CHIP	100	5%	1/10W
R5693	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5694	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5699	1-216-295-00	SHORT	0		
R5700	1-216-295-00	SHORT	0		
R5701	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R5703	1-216-295-00	SHORT	0		
R5705	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W
R5707	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5708	1-216-071-00	RES,CHIP	8.2K	5%	1/10W
R5709	1-216-643-11	METAL CHIP	470	0.50%	1/10W
R5710	1-216-017-00	RES,CHIP	47	5%	1/10W
R5711	1-216-077-00	RES,CHIP	15K	5%	1/10W
R5714	1-216-025-00	RES,CHIP	100	5%	1/10W
R5715	1-216-025-00	RES,CHIP	100	5%	1/10W

<RESISTOR NETWORK>

RB5001	1-236-404-11	NETWORK, RES 220
RB5002	1-236-404-11	NETWORK, RES 220
RB5003	1-236-400-11	NETWORK, RES 100
RB5006	1-236-400-11	NETWORK, RES 100
RB5007	1-236-400-11	NETWORK, RES 100
RB5008	1-236-400-11	NETWORK, RES 100
RB5011	1-236-404-11	NETWORK, RES 220
RB5012	1-236-404-11	NETWORK, RES 220

<VARIABLE RESISTOR>

RV5201	1-241-392-11	RES, ADJ, METAL GLAZE 1K
RV5203	1-241-394-11	RES, ADJ, METAL GLAZE 4.7K
RV5204	1-241-394-11	RES, ADJ, METAL GLAZE 4.7K
RV5205	1-241-394-11	RES, ADJ, METAL GLAZE 4.7K
RV5206	1-241-394-11	RES, ADJ, METAL GLAZE 4.7K
RV5207	1-241-394-11	RES, ADJ, METAL GLAZE 4.7K
RV5208	1-241-394-11	RES, ADJ, METAL GLAZE 4.7K
RV5209	1-241-392-11	RES, ADJ, METAL GLAZE 1K
RV5211	1-241-394-11	RES, ADJ, METAL GLAZE 4.7K
RV5401	1-241-392-11	RES, ADJ, METAL GLAZE 1K
RV5402	1-241-394-11	RES, ADJ, METAL GLAZE 4.7K
RV5403	1-241-394-11	RES, ADJ, METAL GLAZE 4.7K
RV5404	1-241-394-11	RES, ADJ, METAL GLAZE 4.7K
RV5405	1-241-394-11	RES, ADJ, METAL GLAZE 4.7K
RV5406	1-241-394-11	RES, ADJ, METAL GLAZE 4.7K
RV5407	1-241-394-11	RES, ADJ, METAL GLAZE 4.7K
RV5408	1-241-394-11	RES, ADJ, METAL GLAZE 4.7K
RV5410	1-241-394-11	RES, ADJ, METAL GLAZE 4.7K
RV5411	1-241-394-11	RES, ADJ, METAL GLAZE 4.7K
RV5601	1-241-392-11	RES, ADJ, METAL GLAZE 1K
RV5603	1-241-394-11	RES, ADJ, METAL GLAZE 4.7K
RV5604	1-241-394-11	RES, ADJ, METAL GLAZE 4.7K
RV5605	1-241-394-11	RES, ADJ, METAL GLAZE 4.7K
RV5606	1-241-394-11	RES, ADJ, METAL GLAZE 4.7K
RV5607	1-241-394-11	RES, ADJ, METAL GLAZE 4.7K
RV5608	1-241-394-11	RES, ADJ, METAL GLAZE 4.7K
RV5609	1-241-392-11	RES, ADJ, METAL GLAZE 1K
RV5611	1-241-394-11	RES, ADJ, METAL GLAZE 4.7K

<THERMISTOR>

TH5201	1-806-715-11	THERMISTOR

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H J

REF. NO.	PART NO.	DESCRIPTION			REMARK
	* A-1372-259-A	H BOARD, COMPLETE			
		**********			
	* 4-041-068-01	HOLDER, LED			
	4-359-103-00	HOLDER, LED			
		<CAPACITOR>			
C8004	1-163-037-11	CERAMIC CHIP	0.022MF	10%	50V
C8006	1-163-037-11	CERAMIC CHIP	0.022MF	10%	50V
C8009	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C8010	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
		<CONNECTOR>			
CN8001	* 1-564-524-11	PLUG, CONNECTOR 9P			
CN8003	* 1-564-525-11	PLUG, CONNECTOR 10P			
CN8004	* 1-564-518-11	PLUG, CONNECTOR 3P			
CN8005	* 1-564-518-11	PLUG, CONNECTOR 3P			
		<DIODE>			
D8001	8-719-991-33	DIODE 1SS133T-77			
D8002	8-719-920-55	DIODE SPR-54MVW			
D8004	8-719-016-73	DIODE STZ6.8T			
D8005	8-719-812-41	DIODE TLR124			
D8006	8-719-016-73	DIODE STZ6.8T			
D8007	8-719-812-41	DIODE TLR124			
D8008	8-719-016-73	DIODE STZ6.8T			
D8009	8-719-016-73	DIODE STZ6.8T			
D8011	8-719-016-73	DIODE STZ6.8T			
D8012	8-719-016-73	DIODE STZ6.8T			
D8013	8-719-016-73	DIODE STZ6.8T			
		<IC>			
IC8001	8-742-088-10	HYB IC SBX1780-51(10)			
		<JACK>			
J8001	1-573-970-11	BLOCK, (S) TERMINAL			
J8002	1-774-753-11	JACK			
		<COIL>			
L8001	1-408-603-31	INDUCTOR 10UH			
L8002	1-408-603-31	INDUCTOR 10UH			
		<TRANSISTOR>			
Q8001	8-729-027-23	TRANSISTOR DTA114EKA-T146			
		<RESISTOR>			
R8002	1-216-037-00	RES,CHIP	330	5%	1/10W
R8003	1-216-037-00	RES,CHIP	330	5%	1/10W
R8004	1-216-037-00	RES,CHIP	330	5%	1/10W
R8006	1-216-049-00	RES,CHIP	1K	5%	1/10W
R8008	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R8010	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R8012	1-216-073-00	RES,CHIP	10K	5%	1/10W
R8013	1-216-081-00	RES,CHIP	22K	5%	1/10W
R8016	1-216-296-00	SHORT	0		
R8017	1-216-295-00	SHORT	0		
R8018	1-216-295-00	SHORT	0		
R8019	1-216-295-00	SHORT	0		
R8020	1-216-037-00	RES,CHIP	330	5%	1/10W
R8021	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R8022	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R8023	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R8024	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R8025	1-216-295-00	SHORT	0		
R8026	1-216-295-00	SHORT	0		
		<SWITCH>			
S8001	1-571-731-11	SWITCH, TACTIL			
S8003	1-571-731-11	SWITCH, TACTIL			
S8005	1-571-731-11	SWITCH, TACTIL			
S8008	1-571-731-11	SWITCH, TACTIL			
S8010	1-571-731-11	SWITCH, TACTIL			

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	* A-1388-189-A	J BOARD, COMPLETE			
		**********			
		<CAPACITOR>			
C2001	1-163-011-11	CERAMIC CHIP	0.0015MF	10%	50V
C2002	1-163-011-11	CERAMIC CHIP	0.0015MF	10%	50V
C2003	1-126-964-11	ELECT	10MF	20%	50V
C2004	1-126-964-11	ELECT	10MF	20%	50V
C2005	1-104-664-11	ELECT	47MF	20%	16V
C2006	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C2401	1-164-005-11	CERAMIC CHIP	0.47MF		16V
C2402	1-126-933-11	ELECT	100MF	20%	16V
C2403	1-164-005-11	CERAMIC CHIP	0.47MF		16V
C2410	1-126-966-11	ELECT	33MF	20%	50V
C2421	1-104-664-11	ELECT	47MF	20%	16V
C2422	1-104-664-11	ELECT	47MF	20%	16V
C2423	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C2424	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C2425	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C2426	1-104-664-11	ELECT	47MF	20%	16V
C2427	1-164-346-11	CERAMIC CHIP	1MF		16V
C2428	1-164-346-11	CERAMIC CHIP	1MF		16V
C2429	1-104-661-91	ELECT	330MF	20%	16V
C2430	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C2901	1-163-011-11	CERAMIC CHIP	0.0015MF	10%	50V
C2902	1-163-011-11	CERAMIC CHIP	0.0015MF	10%	50V
C2904	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C2905	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C2906	1-101-004-00	CERAMIC	0.01MF		50V
C2907	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C2908	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C2909	1-101-004-00	CERAMIC	0.01MF		50V
C2910	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C2911	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C2912	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C2913	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C2914	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C2915	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C2916	1-163-011-11	CERAMIC CHIP	0.0015MF	10%	50V
C2917	1-163-011-11	CERAMIC CHIP	0.0015MF	10%	50V
C2918	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C2919	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C2920	1-163-011-11	CERAMIC CHIP	0.0015MF	10%	50V
C2921	1-163-011-11	CERAMIC CHIP	0.0015MF	10%	50V
C2922	1-104-664-11	ELECT	47MF	20%	16V
C2923	1-164-346-11	CERAMIC CHIP	1MF		16V
C2924	1-104-664-11	ELECT	47MF	20%	16V
C2925	1-104-664-11	ELECT	47MF	20%	16V
C2926	1-164-346-11	CERAMIC CHIP	1MF		16V
C2928	1-104-664-11	ELECT	47MF	20%	16V
C2929	1-104-664-11	ELECT	47MF	20%	16V
C2930	1-104-664-11	ELECT	47MF	20%	16V
C2931	1-164-346-11	CERAMIC CHIP	1MF		16V

REF. NO.	PART NO.	DESCRIPTION			REMARK
C2932	1-164-346-11	CERAMIC CHIP	1MF		16V
C2933	1-104-664-11	ELECT	47MF	20%	16V
C2935	1-104-664-11	ELECT	47MF	20%	16V
C2936	1-164-346-11	CERAMIC CHIP	1MF		16V
C2937	1-164-346-11	CERAMIC CHIP	1MF		16V
C2938	1-104-664-11	ELECT	47MF	20%	16V
C2939	1-163-011-11	CERAMIC CHIP	0.0015MF	10%	50V
C2940	1-163-011-11	CERAMIC CHIP	0.0015MF	10%	50V
		<CONNECTOR>			
CN2806	1-695-301-11	CONNECTOR, BOARD TO BOARD 40P			
CN2823	* 1-564-524-11	PLUG, CONNECTOR 9P			
		<DIODE>			
D2001	8-719-923-60	DIODE MTZJ-T-77-9.1A			
D2002	8-719-923-60	DIODE MTZJ-T-77-9.1A			
D2401	8-719-923-60	DIODE MTZJ-T-77-9.1A			
D2403	8-719-923-60	DIODE MTZJ-T-77-9.1A			
D2405	8-719-923-60	DIODE MTZJ-T-77-9.1A			
D2406	8-719-923-60	DIODE MTZJ-T-77-9.1A			
D2407	8-719-923-60	DIODE MTZJ-T-77-9.1A			
D2901	8-719-923-60	DIODE MTZJ-T-77-9.1A			
D2902	8-719-923-60	DIODE MTZJ-T-77-9.1A			
D2903	8-719-923-60	DIODE MTZJ-T-77-9.1A			
D2904	8-719-923-60	DIODE MTZJ-T-77-9.1A			
D2905	8-719-923-60	DIODE MTZJ-T-77-9.1A			
D2906	8-719-923-60	DIODE MTZJ-T-77-9.1A			
D2907	8-719-923-60	DIODE MTZJ-T-77-9.1A			
D2908	8-719-923-60	DIODE MTZJ-T-77-9.1A			
D2909	8-719-923-60	DIODE MTZJ-T-77-9.1A			
D2910	8-719-923-60	DIODE MTZJ-T-77-9.1A			
D2911	8-719-923-60	DIODE MTZJ-T-77-9.1A			
D2913	8-719-923-60	DIODE MTZJ-T-77-9.1A			
D2914	8-719-923-60	DIODE MTZJ-T-77-9.1A			
D2915	8-719-923-60	DIODE MTZJ-T-77-9.1A			
D2916	8-719-923-60	DIODE MTZJ-T-77-9.1A			
D2917	8-719-923-60	DIODE MTZJ-T-77-9.1A			
D2919	8-719-923-60	DIODE MTZJ-T-77-9.1A			
D2920	8-719-923-60	DIODE MTZJ-T-77-9.1A			
D2921	8-719-923-60	DIODE MTZJ-T-77-9.1A			
D2922	8-719-923-60	DIODE MTZJ-T-77-9.1A			
D2923	8-719-923-60	DIODE MTZJ-T-77-9.1A			
D2924	8-719-923-60	DIODE MTZJ-T-77-9.1A			
D2925	8-719-923-60	DIODE MTZJ-T-77-9.1A			
D2926	8-719-923-60	DIODE MTZJ-T-77-9.1A			
D2927	8-719-923-60	DIODE MTZJ-T-77-9.1A			
D2928	8-719-923-60	DIODE MTZJ-T-77-9.1A			
D2930	8-719-923-60	DIODE MTZJ-T-77-9.1A			
D2931	8-719-923-60	DIODE MTZJ-T-77-9.1A			
D2932	8-719-923-60	DIODE MTZJ-T-77-9.1A			
		<FERRITE BEAD>			
FB2001	1-414-235-11	INDUCTOR CHIP 0UH			
FB2002	1-414-235-11	INDUCTOR CHIP 0UH			
FB2003	1-414-235-11	INDUCTOR CHIP 0UH			
FB2004	1-414-235-11	INDUCTOR CHIP 0UH			
FB2005	1-414-235-11	INDUCTOR CHIP 0UH			
FB2006	1-414-235-11	INDUCTOR CHIP 0UH			
		<IC>			
IC2401	8-752-068-46	IC CXA1855S			
IC2402	8-759-073-00	IC TEA2114			

REF. NO.	PART NO.	DESCRIPTION			REMARK
		<JACK>			
J2001	1-537-505-11	TERMINAL BOARD (2P)			
J2901	1-695-296-11	TERMINAL BLOCK, S			
J2903	1-695-549-11	SOCKET, PIN 21P			
J2904	1-695-296-11	TERMINAL BLOCK, S			
J2905	1-695-549-11	SOCKET, PIN 21P			
J2906	1-695-296-11	TERMINAL BLOCK, S			
J2907	1-695-549-11	SOCKET, PIN 21P			
		<CHIP CONDUCTOR>			
JR1	1-216-295-00	SHORT	0		
JR4	1-216-296-00	SHORT	0		
JR5	1-216-295-00	SHORT	0		
JR6	1-216-295-00	SHORT	0		
JR8	1-216-295-00	SHORT	0		
JR9	1-216-295-00	SHORT	0		
JR10	1-216-295-00	SHORT	0		
JR11	1-216-295-00	SHORT	0		
JR12	1-216-295-00	SHORT	0		
JR15	1-216-295-00	SHORT	0		
JR50	1-216-296-00	SHORT	0		
JR51	1-216-296-00	SHORT	0		
JR2001	1-216-295-00	SHORT	0		
JR2002	1-216-295-00	SHORT	0		
JR2005	1-216-296-00	SHORT	0		
JR2401	1-216-295-00	SHORT	0		
JR2402	1-216-295-00	SHORT	0		
JR2403	1-216-295-00	SHORT	0		
JR2901	1-216-295-00	SHORT	0		
JR2902	1-216-295-00	SHORT	0		
JR2903	1-216-295-00	SHORT	0		
		<TRANSISTOR>			
Q2001	8-729-620-06	TRANSISTOR 2SC3052-EF			
Q2002	8-729-620-06	TRANSISTOR 2SC3052-EF			
Q2401	8-729-620-06	TRANSISTOR 2SC3052-EF			
Q2402	8-729-620-06	TRANSISTOR 2SC3052-EF			
Q2403	8-729-620-06	TRANSISTOR 2SC3052-EF			
Q2404	8-729-620-06	TRANSISTOR 2SC3052-EF			
		<RESISTOR>			
R2003	1-216-113-00	RES,CHIP	470K	5%	1/10W
R2005	1-216-113-00	RES,CHIP	470K	5%	1/10W
R2006	1-249-421-11	CARBON	2.2K	5%	1/4W
R2007	1-249-421-11	CARBON	2.2K	5%	1/4W
R2401	1-216-009-00	RES,CHIP	22	5%	1/10W
R2403	1-216-025-00	RES,CHIP	100	5%	1/10W
R2404	1-216-158-00	RES,CHIP	22	5%	1/8W
R2405	1-216-025-00	RES,CHIP	100	5%	1/10W
R2406	1-216-158-00	RES,CHIP	22	5%	1/8W
R2407	1-216-025-00	RES,CHIP	100	5%	1/10W
R2410	1-216-174-00	RES,CHIP	100	5%	1/8W
R2411	1-216-174-00	RES,CHIP	100	5%	1/8W
R2412	1-216-022-00	RES,CHIP	75	5%	1/10W
R2413	1-216-022-00	RES,CHIP	75	5%	1/10W
R2414	1-216-022-00	RES,CHIP	75	5%	1/10W
R2416	1-216-113-00	RES,CHIP	470K	5%	1/10W
R2417	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R2419	1-216-113-00	RES,CHIP	470K	5%	1/10W
R2420	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R2421	1-216-022-00	RES,CHIP	75	5%	1/10W
R2423	1-216-015-00	RES,CHIP	39	5%	1/10W
R2424	1-216-174-00	RES,CHIP	100	5%	1/8W
R2425	1-216-174-00	RES,CHIP	100	5%	1/8W
R2428	1-249-393-11	CARBON	10	5%	1/4W F

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The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION			REMARK
R2429	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R2430	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R2431	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R2432	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R2433	1-216-296-00	SHORT	0		
R2434	1-216-198-91	RES,CHIP	1K	5%	1/8W
R2435	1-216-049-00	RES,CHIP	1K	5%	1/10W
R2436	1-216-049-00	RES,CHIP	1K	5%	1/10W
R2437	1-216-049-00	RES,CHIP	1K	5%	1/10W
R2438	1-216-296-00	SHORT	0		
R2439	1-216-295-00	SHORT	0		
R2440	1-216-296-00	SHORT	0		
R2901	1-216-039-00	RES,CHIP	390	5%	1/10W
R2902	1-216-039-00	RES,CHIP	390	5%	1/10W
R2903	1-216-113-00	RES,CHIP	470K	5%	1/10W
R2904	1-216-113-00	RES,CHIP	470K	5%	1/10W
R2905	1-216-039-00	RES,CHIP	390	5%	1/10W
R2906	1-216-039-00	RES,CHIP	390	5%	1/10W
R2907	1-216-171-00	RES,CHIP	75	5%	1/8W
R2908	1-216-171-00	RES,CHIP	75	5%	1/8W
R2909	1-216-113-00	RES,CHIP	470K	5%	1/10W
R2910	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R2911	1-216-022-00	RES,CHIP	75	5%	1/10W
R2913	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R2914	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R2915	1-216-113-00	RES,CHIP	470K	5%	1/10W
R2916	1-216-113-00	RES,CHIP	470K	5%	1/10W
R2917	1-216-171-00	RES,CHIP	75	5%	1/8W
R2918	1-216-171-00	RES,CHIP	75	5%	1/8W
R2919	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R2920	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R2921	1-216-022-00	RES,CHIP	75	5%	1/10W
R2922	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2923	1-216-039-00	RES,CHIP	390	5%	1/10W
R2924	1-216-039-00	RES,CHIP	390	5%	1/10W
R2925	1-216-089-00	RES,CHIP	47K	5%	1/10W
R2926	1-216-039-00	RES,CHIP	390	5%	1/10W
R2927	1-216-039-00	RES,CHIP	390	5%	1/10W
R2928	1-216-089-00	RES,CHIP	47K	5%	1/10W
R2929	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R2930	1-216-113-00	RES,CHIP	470K	5%	1/10W
R2931	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R2932	1-216-113-00	RES,CHIP	470K	5%	1/10W
R2933	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2934	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R2935	1-216-022-00	RES,CHIP	75	5%	1/10W
R2936	1-216-171-00	RES,CHIP	75	5%	1/8W
R2937	1-216-113-00	RES,CHIP	470K	5%	1/10W
R2938	1-216-039-00	RES,CHIP	390	5%	1/10W
R2939	1-216-039-00	RES,CHIP	390	5%	1/10W
R2940	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R2941	1-216-113-00	RES,CHIP	470K	5%	1/10W
R2942	1-216-039-00	RES,CHIP	390	5%	1/10W
R2943	1-216-089-00	RES,CHIP	47K	5%	1/10W
R2944	1-216-039-00	RES,CHIP	390	5%	1/10W
R2945	1-216-089-00	RES,CHIP	47K	5%	1/10W
R2946	1-216-022-00	RES,CHIP	75	5%	1/10W
R2948	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2949	1-216-113-00	RES,CHIP	470K	5%	1/10W
R2950	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R2951	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R2952	1-216-113-00	RES,CHIP	470K	5%	1/10W
R2953	1-216-039-00	RES,CHIP	390	5%	1/10W
R2954	1-216-039-00	RES,CHIP	390	5%	1/10W
R2955	1-216-039-00	RES,CHIP	390	5%	1/10W
R2956	1-216-089-00	RES,CHIP	47K	5%	1/10W
R2957	1-216-039-00	RES,CHIP	390	5%	1/10W
R2958	1-216-089-00	RES,CHIP	47K	5%	1/10W
R2959	1-216-674-11	METAL CHIP	9.1K	0.50%	1/10W
R2960	1-216-674-11	METAL CHIP	9.1K	0.50%	1/10W
R2961	1-216-674-11	METAL CHIP	9.1K	0.50%	1/10W
R2962	1-216-022-00	RES,CHIP	75	5%	1/10W
R2963	1-216-022-00	RES,CHIP	75	5%	1/10W
R2964	1-216-022-00	RES,CHIP	75	5%	1/10W
R2967	1-216-171-00	RES,CHIP	75	5%	1/8W
R2968	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R2969	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R2970	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R2971	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R2972	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R2973	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R2974	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R2975	1-216-113-00	RES,CHIP	470K	5%	1/10W
R2976	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R2977	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R2978	1-216-037-00	RES,CHIP	330	5%	1/10W
R2979	1-216-037-00	RES,CHIP	330	5%	1/10W
R2980	1-216-037-00	RES,CHIP	330	5%	1/10W
R2981	1-216-037-00	RES,CHIP	330	5%	1/10W

****

* A-1390-621-A TA BOARD, COMPLETE
****

<CONNECTOR>

CN9501 * 1-564-518-11 PLUG, CONNECTOR 3P

<SWITCH>

S9501 1-570-245-11 SWITCH, MICRO

****

* A-1390-622-A TB BOARD, COMPLETE
****

<CONNECTOR>

CN9551 * 1-564-518-11 PLUG, CONNECTOR 3P

<SWITCH>

S9551 1-570-245-11 SWITCH, MICRO

****

MISCELLANEOUS
****

1-251-372-21 BOOSTER, RF
⚠ 1-473-545-13 POWER BLOCK
1-505-207-11 SPEAKER (5.7CM)
1-505-845-11 SPEAKER (10CM)
⚠ 1-533-746-11 THERMOSTAT

1-543-653-11 CORE ASSY, BEAD(DIVISION TYPE)
1-698-696-21 FAN, DC
⚠* 1-758-091-12 OPTICAL UNIT
⚠ 1-776-860-12 POWER COARD, FILTER (UK)
* 1-777-539-11 CABLE, PIN

****

REF. NO.	PART NO.	DESCRIPTION	REMARK
		ACCESSORIES AND PACKING MATERIALS	
		**********	
	X-4033-430-1	WRENCH ASSY	
	X-4200-355-1	DUST REMOVER ASSY	
	3-701-910-00	SCREW, SPECIAL (DIA. 3.8X20)	
	4-392-004-01	CLIP	
	4-203-832-61	MANUAL, INSTRUCTION	
	4-204-004-01	CARD, INQUIRY	
*	4-030-594-11	BAG, PROTECTION	
*	4-030-895-01	JOINT	
*	4-054-723-01	CUSHION (UPPER) (ASSY)	
*	4-054-724-01	CUSHION (LOWER) (ASSY)	
*	4-054-725-01	TRAY	
*	4-060-568-01	INDIVIDUAL CARTON	
		REMOTE COMMANDER	
		**********	
	1-473-407-11	COMMANDER, STANDARD (RM-838)	

9-965-245-01

Sony Ichinomiya Corporation
Quality Assurance Division

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